# Garland DA

## Top Shelf

### 1NC

#### Nomination will pass

Siobhan Hughes 4/1, WSJ Staff, "White House Pushes Steady Supreme Court Confirmation Strategy", 4-1-2016, WSJ, http://blogs.wsj.com/washwire/2016/04/01/white-house-pushes-ahead-with-step-by-step-garland-supreme-court-confirmation-strategy/, DOA: 4-6-2016, y2k

White House officials on Friday stuck to a strategy of pushing forward step-by-step on Judge Merrick Garland’s nomination to the Supreme Court, projecting optimism about a process that Senate Republicans have said is on hold until a new president is sworn in.

“We think that we’re making progress on this and we think we have a really good chance,” White House Counsel Neil Eggleston said at a breakfast organized by Politico’s Playbook.

Senate Majority Leader Mitch McConnell (R, Ky.) has rejected holding hearings or a confirmation vote, and has said that there would be no point in even meeting with Judge Garland. Senate Republicans had largely rallied around that strategy, saying voters in the November election should have a say in the process by electing a new president.

Now, the Obama administration is optimistic about the willingness of what it estimates are 16 or 17 Republican senators so far willing to meet with Judge Garland. By beginning the initial conversation with individual Republican senators, White House officials hope to build enough support for Judge Garland to push Senate Republican leaders to first hold hearings and then allow a vote before President Barack Obama leaves office.

Senate Republican leaders say that won’t happen. “No senators have changed their minds or changed their principled positions,” said Don Stewart, a spokesman for Mr. McConnell. He says that even after a “massive campaign” by the White House and liberal groups, there are still only two Republican senators calling for hearings.

The White House is pinning its hopes on public pressure, especially on Republicans in tough re-election battles. Sen. Mark Kirk (R., Ill.), one of the most vulnerable Republican incumbents, met with Judge Garland earlier this week, and Sen. John Boozman (R., Ark.), who is also up for re-election, is to meet with him on Tuesday. Sen. Susan Collins (R., Maine), who has been critical of her party for breaking decades of tradition by shutting down the confirmation process, also meets with Judge Garland on Tuesday, in one of 11 meetings currently slated for next week between the judge and senators.

Mr. Obama will continue to use the power of the bully pulpit to mobilize public support on Thursday, when he goes to the University of Chicago Law School to meet with law students and discuss the confirmation process, White House officials said on Friday. In the meantime, senators return next week from a two-week recess and will have a chance to swap stories about the reactions they gathered back home.

#### PC is key

Charles Shipan 2/15 is the J. Ira Harris professor of social science at the University of Michigan, "If Obama appoints Scalia’s successor, the Supreme Court will really jump leftward", Washington Post, https://www.washingtonpost.com/news/monkey-cage/wp/2016/02/15/if-obama-appoints-scalias-successor-the-supreme-court-will-really-jump-leftward/, DOA: 2-18-2016, y2k

Now, if the Senate took our simple theory seriously, Republicans don’t have to worry too much about Kagan becoming the new median, because the Republican-controlled Senate simply wouldn’t approve a nominee who would produce such a shift. In fact, the Senate has little incentive to approve any nominee who would shift the court to the left.

However, there’s a problem for the Senate. In a recent paper, we found that presidents are much more powerful than the simple Moraski-Shipan model suggests. In fact, presidents regularly end up being able to use appointments to pull the court toward their preferred ideology – even when the Senate should be able to stop them from doing so. They can do this by drawing upon their political capital – leaning on members of Congress to get their support, trying to rally public opinion, and so on. Given this, there’s the possibility that the president might be able to pull the court toward his preferred ideology – perhaps even as far as Kagan.

There’s always a lot at stake in presidential nominations to the court. These political science tools – which help us to think systematically about the crucial role of the median justice on the Supreme Court – tell us why there’s even more at stake this time around.

#### The plan causes a political firestorm—republicans hate it.

Devaney 15 (Tim, writer @ the hill, “NRA gun feud boils over,” 04/04/15, http://thehill.com/regulation/legislation/237806-dc-nra-gun-feud-boils-over)//ghs-VA

#### **A years-old feud between** the **D**istrict of **C**olumbia **and the** **N**ational **R**ifle **A**ssociation **is raging** anew, as the powerful gun lobby throws its might behind GOP legislation aiming to strike down local firearm restrictions. **The showdown centers around the Second Amendment Enforcement Act, introduced last week by** **Sen**. Marco **Rubio** (R-Fla.) **and Rep**. Jim **Jordan** (R-Ohio). The bill is designed to roll back many of the barriers to gun ownership in Washington, D.C. The emerging battle has once again put the deeply liberal District at “the epicenter” of the national gun debate, according to the congresswoman who represents Washington. “This is a place where **gun control can get done**,” Del. Eleanor Holmes Norton told The Hill, “**but** also a place where we have had so much gun violence, because **we are being bullied by members of Congress**.” D.C.’s involvement as a major player on gun control issues dates back decades. In the early 1970s, Congress passed “home rule,” giving Washington, D.C., the authority to govern the city's local affairs. Shortly thereafter, Washington, D.C., issued a controversial ban on handguns, which prohibited residents from not only carrying guns in public, but even possessing firearms in their own homes for personal protection. **Gun control advocates** argued the ban was necessary for a city that suffered from a high crime rate. Second Amendment advocates were irate, **set**ting **off** the first in **a series of legal battles pitting the NRA — and its congressional allies — against the District**. “The relationship between Congress and Washington, D.C., over guns has been so contentious because the city government keeps passing very strict gun control laws but **Republicans are very opposed to gun control**,” said UCLA law professor Adam Winkler, author of Gunfight: The Battle over the Right to Bear Arms in America. **The Supreme Court struck down the handgun ban in** a 2008 case known as **D**istrict of **C**olumbia **v. Heller**, but the city subsequently issued a series of restrictive gun laws that forced gun owners to go through hoops just to keep firearms in their homes. Meanwhile, in Washington, D.C., gun owners were still prohibited from carrying firearms outside their homes in public. The question is “whether the right to bear arms gives you the right to carry guns in public?” asked Winkler. In another blow to Washington, D.C.'s gun laws, the rule against concealed carry was also struck down last year in federal court in a case known as Palmer v. District of Columbia. The city waived the white flag this week, signaling it would drop an appeal of the court's decision. Despite these rulings, the NRA contends that the strict gun laws in Washington, D.C., make it all but impossible for people to carry firearms around the city. Twenty-one residents have qualified for concealed carry permits in Washington, D.C., according to the police department. "They want to be more restrictive than they’re allowed to be under the Constitution, which is the problem,” an NRA official told The Hill. “They’re not looking to make it reasonable for law-abiding citizens and difficult for criminals. They’re making it difficult across the board.” But the new Republican legislation could change that. The Second Amendment Enforcement Act would expand the city’s concealed carry laws, making it easier for residents and tourists from other states to legally carry firearms in Washington, D.C. "A lot of American tourists visit Washington, D.C. They want to view the Capitol and the museums, but they also want to be safe," the NRA official said. In addition to making it easier to carry guns in Washington, D.C., the gun bill would also make it more difficult for law enforcement to keep track of those firearms. The legislation would get rid of the city’s gun registry. “If you’re registering a firearm, the government knows who has what firearms, how many firearms they have, what you’re doing with them,” the NRA official said. "That’s none of the government’s business.” Currently, residents can only buy guns from two legally authorized firearms dealers in Washington, D.C., according to the police department, but the Republican legislation would also allow people to buy guns in the neighboring states of Virginia and Maryland. The politics surrounding the gun bill aren't sitting well with Democrats and gun control groups. Shortly after introducing the legislation, the NRA boosted Rubio’s rating on gun rights in advance of his expected presidential run, prompting Norton to suggest he made a deal with the gun lobby to help him win over Republican voters. But the NRA disputed the charges. Rubio's rating hadn't been updated since before he took office, the gun lobby explained, and the higher rating was based on the entirety of his votes in Congress. "Rubio has a perfect voting record in the Senate," NRA spokeswoman Jennifer Baker said. "His rating reflects five years worth of votes in defense of the Second Amendment.” The White House has publicly come out against the bill. Norton called the gun bill an “act of abuse and disrespect” toward Washington, D.C. “**Washington D.C.’s gun laws are attacked on a daily basis by many Republicans**,” she said

#### Successful nomination is key to CPP---solves warming

Bydeirdre Fulton 16, "Nothing Less Than Fate of Planet Hinges on Next Supreme Court Nominee", 2-18-2016, Common Dreams, http://www.commondreams.org/news/2016/02/17/nothing-less-fate-planet-hinges-next-supreme-court-nominee, DOA: 2-18-2016, y2k

As Washington, D.C. gears up for a Supreme Court showdown, experts this week are predicting that the person chosen to fill Justice Antonin Scalia's seat on the high court bench will have a huge impact on the fate of the planet.

Common Dreams previously reported that several high-profile cases hang in the balance in the wake of Scalia's death. But perhaps none will be as closely watched as the case that pits fossil fuel giants and Republicans against environmentalists and the Obama administration.

"In dying," science journalist John Upton wrote on Sunday, "Scalia may have done more to support global climate action than most people will do in their lifetimes."

That's because, as Upton explained in a separate piece, Scalia's death "means it is now more likely that key EPA rules that aim to curb climate pollution from the power industry will be upheld."

And those rules—namely the Clean Power Plan (CPP), which aims to reduce carbon pollution from power plants—are necessary for the United States to deliver on the promises made at the COP21 climate summit in Paris in December. Without the CPP, Upton argued, "the U.S. would be left without a credible plan for fulfilling its pledge to reduce its climate pollution by a little more than a quarter in 2025 compared with 2005 levels."

One of Scalia's final acts as a Supreme Court justice was to vote in favor of an unprecedented stay on the CPP until it has been reviewed by the U.S. Court of Appeals for the District of Columbia Circuit, with arguments set for June 2.

The D.C. Circuit is likely to issue a decision on the Clean Power Plan this fall, which would put the rule back in front of the Supreme Court in spring 2017.

"What happens then will depend on whether the court's now vacant ninth seat has been filled and, if so, by whom," Jack Lienke, a lawyer with the Institute for Policy Integrity at New York University School of Law, wrote on Tuesday. "But in most of the possible scenarios, the EPA faces considerably better odds than it did with Scalia on the bench."

There's something in the air...

If a new justice is confirmed before President Barack Obama leaves office, "it does seem fair to assume that an Obama appointee will be more likely to join with the four liberals to uphold the Clean Power Plan than to vote with the four remaining conservatives to strike it down," Lienke said.

The shakiest scenario would be if Obama's successor were to get Scalia's replacement through the Senate in time to weigh in on the CPP. That would be good news for environmentalists if the next president is a Democrat.

But even if a Republican wins in November and gets a conservative nominee onto the bench, "the EPA would be no worse off than it was in the immediate aftermath of the stay," Lienke continued. "The court would once again be made up of five conservatives and four liberals, and EPA's best bet would once again be to convince Kennedy or Roberts to break ranks."

Or, Lienke concluded:

Finally, it's possible that Scalia's seat will still be vacant when the Clean Power Plan reaches the Supreme Court. In that scenario, the most likely result is an even split between the four liberals and four remaining conservatives. And a 4-4 vote results in an automatic affirmance of the decision below, which, in this case, would be the DC Circuit's. Of course, the DC Circuit hasn't made its decision yet, and we can't know for sure what it will be. But the panel of judges assigned to the case is generally viewed as favorable to the EPA, because two of the three were appointed by Democrats—one by President Clinton and the other by Obama himself.

Furthermore, the New York Times wrote on Tuesday, "If the Senate were to confirm whomever President Obama nominates to succeed Justice Scalia, one of the most conservative justices on the bench, the Supreme Court would probably become more sensitive to the imperative to combat climate change. That’s not just good news for the Clean Power Plan. It could open the door to more aggressive policies."

Given these stakes, it's not surprising that green groups are applying heavy scrutiny to potential nominees, such as federal appellate court judge Sri Srinivasan, who has emerged at the front of the pack of possible Scalia replacements.

The 48-year-old Indian-American has an "inspiring biography," Politico reports on Wednesday. But, reporter Elana Schor continues, "his history of representing large corporations runs the risk of alienating Obama allies looking to gauge his still-developing record on key liberal priorities."

Srinivasan's work on cases "in which he defended ExxonMobil and the mining company Rio Tinto have raised particular objections from environmentalists," Politico writes. "He also represented that enduring symbol of corporate excess, former Enron CEO Jeff Skilling, in the appeal of the executive’s fraud and conspiracy convictions."

Jamie Henn, of 350.org, told Politico that Srinivasan's work for Exxon was a "deeply disturbing" aspect of a "mixed" resume. Jane Kleeb, of Bold Nebraska, put it more starkly. "Any judge that sides with Big Oil over the American people has no place on our Supreme Court," she said in an email to the publication.

Still, as Todd Aagaard, vice dean and professor at Villanova University School of Law, told Environment & Energy Publishing, "While all of the nominees would give environmental advocates a fair shot, I doubt any of them would automatically incline to favor the 'pro-environmental' side in a case."

Yet "if you look closely at Scalia’s legacy on climate change, it’s hard to picture his replacement (even a Republican appointee!) harboring a more willful disregard for science," Eric Holthaus, a meteorologist and staff writer at Slate, wrote on Monday.

"[C]limate activists, who are increasingly a major part of the electorate, now have a big boost to push for bolder promises from Hillary Clinton and Bernie Sanders," Holthaus continued. "Backed by a Supreme Court that would presumably place greater value on the planet’s health, there’s nowhere to go but full-speed ahead in the race to reduce humanity’s carbon footprint."

#### Extinction

Roberts 13– citing the World Bank Review’s compilation of climate studies - 4 degree projected warming, can’t adapt - heat wave related deaths, forest fires, crop production, water wars, ocean acidity, sea level rise, climate migrants, biodiversity loss. ("If you aren’t alarmed about climate, you aren’t paying attention", January 10, 2013, [http://grist.org/climate-energy/climate-alarmism-the-idea-is-surreal](http://grist.org/climate-energy/climate-alarmism-the-idea-is-surreal/~~))

We know we’ve raised global average temperatures around 0.8 degrees C so far. We know that 2 degrees C is where most scientists predict catastrophic and irreversible impacts. And we know that we are currently on a trajectory that will push temperatures up 4 degrees or more by the end of the century. What would 4 degrees look like? A recent [World Bank review of the science](http://climatechange.worldbank.org/) reminds us. First, it’ll get hot: Projections for a 4°C world show a dramatic increase in the intensity and frequency of high-temperature extremes. Recent extreme heat waves such as in Russia in 2010 are likely to become the new normal summer in a 4°C world. Tropical South America, central Africa, and all tropical islands in the Pacific are likely to regularly experience heat waves of unprecedented magnitude and duration. In this new high-temperature climate regime, the coolest months are likely to be substantially warmer than the warmest months at the end of the 20th century. In regions such as the Mediterranean, North Africa, the Middle East, and the Tibetan plateau, almost all summer months are likely to be warmer than the most extreme heat waves presently experienced. For example, the warmest July in the Mediterranean region could be 9°C warmer than today’s warmest July. Extreme heat waves in recent years have had severe impacts, causing heat-related deaths, forest fires, and harvest losses. The impacts of the extreme heat waves projected for a 4°C world have not been evaluated, but they could be expected to vastly exceed the consequences experienced to date and potentially exceed the adaptive capacities of many societies and natural systems. [my emphasis] Warming to 4 degrees would also lead to “an increase of about 150 percent in acidity of the ocean,” leading to levels of acidity “unparalleled in Earth’s history.” That’s bad news for, say, coral reefs: The combination of thermally induced bleaching events, ocean acidification, and sea-level rise threatens large fractions of coral reefs even at 1.5°C global warming. The regional extinction of entire coral reef ecosystems, which could occur well before 4°C is reached, would have profound consequences for their dependent species and for the people who depend on them for food, income, tourism, and shoreline protection. It will also “likely lead to a sea-level rise of 0.5 to 1 meter, and possibly more, by 2100, with several meters more to be realized in the coming centuries.” That rise won’t be spread evenly, even within regions and countries — regions close to the equator will see even higher seas. There are also indications that it would “significantly exacerbate existing water scarcity in many regions, particularly northern and eastern Africa, the Middle East, and South Asia, while additional countries in Africa would be newly confronted with water scarcity on a national scale due to population growth.” Also, more extreme weather events: Ecosystems will be affected by more frequent extreme weather events, such as forest loss due to droughts and wildfire exacerbated by land use and agricultural expansion. In Amazonia, forest fires could as much as double by 2050 with warming of approximately 1.5°C to 2°C above preindustrial levels. Changes would be expected to be even more severe in a 4°C world. Also loss of biodiversity and ecosystem services: In a 4°C world, climate change seems likely to become the dominant driver of ecosystem shifts, surpassing habitat destruction as the greatest threat to biodiversity. Recent research suggests that large-scale loss of biodiversity is likely to occur in a 4°C world, with climate change and high CO2 concentration driving a transition of the Earth’s ecosystems into a state unknown in human experience. Ecosystem damage would be expected to dramatically reduce the provision of ecosystem services on which society depends (for example, fisheries and protection of coastline afforded by coral reefs and mangroves.) New research also indicates a “rapidly rising risk of crop yield reductions as the world warms.” So food will be tough. All this will add up to “large-scale displacement of populations and have adverse consequences for human security and economic and trade systems.” Given the uncertainties and long-tail risks involved, “there is no certainty that adaptation to a 4°C world is possible.” There’s a small but non-trivial chance of advanced civilization breaking down entirely. Now ponder the fact that some scenarios show us going up to 6degrees by the end of the century, a level of devastation we have not studied and barely know how to conceive. Ponder the fact that somewhere along the line, though we don’t know exactly where, enough self-reinforcing feedback loops will be running to make climate change unstoppable and irreversible for centuries to come. That would mean handing our grandchildren and their grandchildren not only a burned, chaotic, denuded world, but a world that is inexorably more inhospitable with every passing decade.

### 2NC Overview

Warming outweighs and turns the case

1. Probability—scientific consensus and spillover effect make extinction from climate change extraordinarily likely—wrecks food supply, bio-diversity, water, etc.

#### Magnitude—fallacies with nuclear winter theory means only we access extinction

Russell Seitz 11, a former associate of the John M. Olin Institute for Strategic Studies at Harvard University’s Center for International Affairs, “Nuclear winter was and is debatable”, Nature. 7/1/2011, Vol. 475 Issue 7354, p37-37. 1

Alan Robock's contention that there has been no real scientific debate about the 'nuclear winter' concept is itself debatable (Nature 473, 275–276; 2011). This potential climate disaster, popularized in Science in 1983, rested on the output of a one-dimensional model that was later shown to overestimate the smoke a nuclear holocaust might engender. More refined estimates, combined with advanced three-dimensional models (see http://go.nature.com/kss8te), have dramatically reduced the extent and severity of the projected cooling. Despite this, Carl Sagan, who co-authored the 1983 Science paper, went so far as to posit “the extinction of Homo sapiens” (C. Sagan Foreign Affairs 63, 75–77; 1984). Some regarded this apocalyptic prediction as an exercise in mythology. George Rathjens of the Massachusetts Institute of Technology protested: “Nuclear winter is the worst example of the misrepresentation of science to the public in my memory,” (see http://go.nature.com/yujz84) and climatologist Kerry Emanuel observed that the subject had “become notorious for its lack of scientific integrity” (Nature 319, 259; 1986). Robock's single-digit fall in temperature is at odds with the subzero (about −25 °C) continental cooling originally projected for a wide spectrum of nuclear wars. Whereas Sagan predicted darkness at noon from a US–Soviet nuclear conflict, Robock projects global sunlight that is several orders of magnitude brighter for a Pakistan–India conflict — literally the difference between night and day. Since 1983, the projected worst-case cooling has fallen from a Siberian deep freeze spanning 11,000 degree-days Celsius (a measure of the severity of winters) to numbers so unseasonably small as to call the very term 'nuclear winter' into question.

## Uniqueness

### 2NC – Will Pass – EXTN

#### Garland nomination will pass--- Prefer predictive uniqueness---their evidence is just a snapshot of the squo---despite some opposition exists, GOP members are willing to come on board---Their evidence doesn’t assume political capital which solves backlash---prefer our evidence which cites poli sci research---that’s Hughes and Shipan.

#### Prefer trend---GOP is cracking under pressure

Washington Times 4/3, "Obama’s confidence higher over Supreme Court pick", 4-3-16, Washingtion Times, http://www.washingtontimes.com/news/2016/apr/3/obamas-confidence-higher-over-supreme-court-pick-m/?page=2, DOA: 4-7-2016, y2k

With senators returning to Washington this week from a two-week recess, the White House is expressing growing optimism it can break a Republican blockade of a Senate confirmation hearing for President Obama’s Supreme Court nominee, Judge Merrick Garland.

Mr. Obama will try to raise the public pressure on the GOP on Thursday when he travels to the University of Chicago Law School, where he once taught, to make a pitch for the 63-year-old nominee, currently the chief judge of the United States Court of Appeals for the District of Columbia Circuit.

On Monday night, Sen. Elizabeth Warren, Massachusetts Democrat, will hold a nationwide call with progressive activists to marshal more grass-roots support for the Garland nomination.

And on Tuesday, two more Republicans, Sens. Susan M. Collins of Maine and John Boozman of Arkansas, have agreed to meet with the nominee. They bring to at least 16 the number of GOP senators who have at least talked directly with Judge Garland, despite the refusal of Senate Majority Leader Mitch McConnell of Kentucky and Judiciary Committee Chairman Chuck Grassley of Iowa to schedule a committee confirmation hearing.

“We think that we’re making progress on this, and we think we have a really good chance,” White House counsel Neil Eggleston told reporters Friday.

Sen. Charles E. Schumer, New York Democrat, asserted that Republican senators “are beginning to change” partly due to incumbents’ fear of the wrath of independent voters in critical swing states.

“Leader McConnell and Chairman Grassley are trying to drive Republicans off a cliff,” he told reporters. “But fewer and fewer of them are willing to go along for the ride.”

#### We have a vote count---prefer quantitative voting model analysis

Jordan Ragusa 3/18, an Assistant Professor of Political Science at the College of Charleston, a Research Fellow in the Center for Public Choice and Market Process, and Co-Director of the American Politics Research Team, "If the Senate allowed a Merrick Garland vote, he might pass", 3-18-2016, http://www.csmonitor.com/USA/Politics/Politics-Voices/2016/0318/If-the-Senate-allowed-a-Merrick-Garland-vote-he-might-pass, DOA: 4-7-2016, y2k

Despite the statements of the two senators, one of the reasons Mr. Obama selected Garland is the fact that he is relatively moderate, as indicated by this Monkey Cage post, and was thus approved by the Senate in 1997 by a vote of 76 to 23. Notably, Garland was appointed to the D.C. Circuit in that year by a Republican controlled Senate, receiving the support of a majority of Senate Republicans (32 to 23).

On the surface, this would seem to bode well for Garland’s chances of making it to the Supreme Court despite obstructionist claims. However, much has changed since 1997.

In this context (and many like it) the biggest change since 1997 has been the increase in ideological polarization in Congress. Countless studies have documented that Democrats and Republicans have drifted further apart over the past three decades. My work on this topic argues that a major reason for the Senate’s polarization has been the increase in the number of senators who first served in the (more polarized) House of Representatives (see here and here).

A straightforward analysis can help us adjudicate between these competing expectations about Garland’s likelihood of being confirmed (and crudely estimate how many votes he might receive). Although this analysis has a number of limitations, it can give use a rough sense of what to expect.

I estimated a simple logit model of the 1997 vote to confirm Garland to the D.C. Circuit. All data came from Keith Poole’s Vote View website. The model includes just two variables: a senator’s ideology and whether that senator is from the South. Although this is a very simple model for sure, it performs well, correctly predicting 88 percent of the "yeas" and "nays" in 1997.

Based on that model’s estimates, I then predicted what would happen in the current Senate. Data on the ideology of senators in the 114th Congress also came from Poole’s Vote View website.

Figures 1 and 2 below present a senator’s predicted probability of voting for Garland (on the y-axis) by their ideology (on the x-axis). Liberals are on the left, conservatives on the right. Figure 1 is for the actual for Garland in 1997 (105th Congress) and Figure 2 is for the simulated vote in the current Congress (114th Congress). Democrats are in blue and Republicans are in Red.

Figure 1

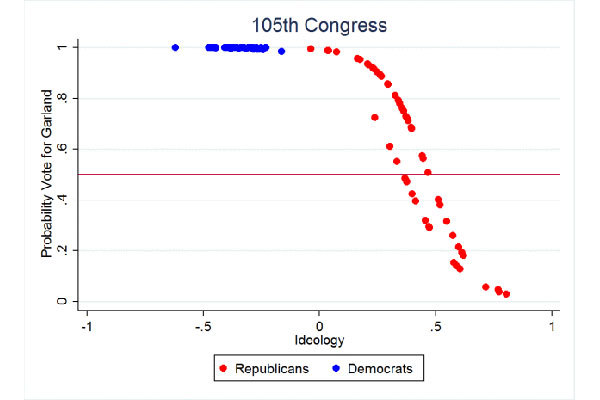
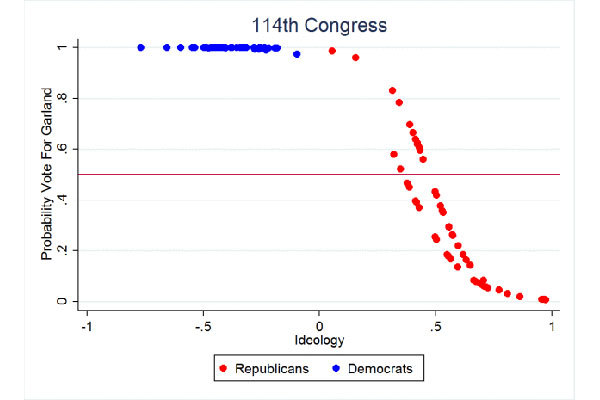


Figure 2



In the current Congress, the model estimates that 60 senators would vote for Garland and 40 would vote against his confirmation. Looking at the figure, 60 senators are above the 50 percent threshold (more likely to vote for Garland than against) and 40 senators are below the 50 percent threshold.

All Democrats are predicted for Garland as are 14 Republicans. The predicted Republican yes votes are: Sens. Lamar Alexander of Tennessee, Cory Gardner of Colorado, Shelley Moore Capito of West Virginia, Jeff Flake of Arizona, Mike Rounds of South Dakota, John McCain of Arizona, John Hoeven North Dakota, Dean Heller of Nevada, Rob Portman of Ohio, Orrin Hatch of Utah, Kelly Ayotte of New Hampshire, Mark Kirk of Illinois, Lisa Murkowski of Alaska, and Susan Collins of Maine.

#### Err neg on uniqueness---even a small shift in GOP opinion *matters*---small meetings are softening GOP’s opposition

Josh Gerstein 4/6, "More Republicans agree to meet with Garland", 4-6-2016, POLITICO, http://www.politico.com/story/2016/03/republicans-meet-merrick-garland-supreme-court-221432, DOA: 4-6-2016, y2k

At least two Senate Republicans plan to meet with Merrick Garland next week, suggesting there's momentum behind the Democratic campaign to pressure the GOP into at least one-on-one meetings with the Supreme Court nominee, if not an actual confirmation vote this year.

Sen. Susan Collins of Maine had said during an interview with a Maine radio station earlier this week she will meet with Garland. And a spokesman for Sen. John Boozman of Arkansas said Thursday that he is planning one as well.

“My understanding is that is currently being worked out for next week,” Boozman spokesman Patrick Creamer said in an email.

Senate Republicans, who overwhelmingly say Garland’s nomination should not move forward this year, argue these meetings are purely a matter of courtesy. They point to the fact that only three GOP senators have called for hearings this year.

“The fact that after a month and a half of a sustained political campaign (and millions of dollars spent by MoveOn.org and other left-wing groups) and all they can point to is a handful of courtesy visits demonstrates that the special interests haven't succeeded in moving senators away from a principled decision,” said Don Stewart, spokesman for Senate Majority Leader Mitch McConnell (R-Ky.).

But Democrats see these one-on-ones with Garland as a key way to gain ground — however incremental — in their war of attrition over the Republican blockade of Garland.

#### \*\*\*Obama’s strategy solves---GOP blockade is collapsing

Maya Rhodan 4/5, "Obama's Low-Key Barnstorming for a Supreme Court Nominee", 4-5-2016, TIME, http://time.com/4284158/obamas-low-key-barnstorming-for-a-supreme-court-nominee/, DOA: 4-6-2016, y2k

The uphill battle to get his Supreme Court nominee confirmed continues

Make no mistake: President Obama thinks the Senate should confirm his Supreme Court nominee, Merrick Garland. He thinks Senate Republicans are derelict in their constitutional duty for not holding hearings or even voting on his nomination. And he’s going to pressure them about it.

But that doesn’t mean he’s going to get worked up.

In keeping with a low-key style that he’s shown in a number of contentious political fights during his presidency, Obama is barnstorming without creating too much of a storm, making his case against the opposition in a calm and measured way.

In the three weeks since Obama announced his pick to replace the late Antonin Scalia on the nation’s highest court, his Administration has ushered Garland to Capitol Hill to meet with Senate Democrats. White House spokesman Josh Earnest has repeatedly made the case that Garland deserves a hearing in daily press briefings. Vice President Joe Biden has spoken at Georgetown Law School.

On Thursday, Obama will try once more at the University of Chicago Law School, where he once taught constitutional law.

Earnest has said President Obama is looking to make the legal case on why the Senate should move forward with the nomination process. Stalling, the president is set to argue, will jeopardize public confidence in the judicial system.

“If it gets overly politicized and starts to break down on party lines, that’s going to undermine the public confidence in the notion that when it comes to interpreting the law and the rule of law, that politics should be set aside,” Earnest said Tuesday. “And so you will hear the President talk a little bit more about this, and I think it’s an important argument for the American people to hear.”

The fact is, though, the majority of Americans already agree with that sentiment. Before the president announced his nominee, who is considered a consensus candidate for the position, polls suggested that most Americans wanted the Senate to give Obama’s pick a fair hearing. More recent polling shows that 64% of Americans say the Senate should at least hold hearings. And a little over half say Garland should be confirmed.

Republicans in the Senate, however, are a different story.

A sprinkling of Republicans have or plan to meet with Garland for what the White House has called “courtesy visits.” Sen. Susan Collins of Maine who met with Garland on Tuesday, said the meeting left her more convinced that the Senate should get moving and called for hearings. Five additional Republicans, including Senate Judiciary Committee Chairman Chuck Grassley, have also agreed this week to meet with Garland.

But Senate GOP leadership is holding strong. Just two hours after Garland’s meeting with Sen. Collins, a moderate Republican, Senate Majority Leader Mitch McConnell told reporters, “it’s safe to say there will not be hearings or votes.” On a grassroots level, organizations like the Judicial Crisis Network are pouring money into ads to urge Senators to let the next president pick the nominee. The JCN spent about $4 million in the past month.

Earnest said that the Republicans’ plan of blockading the nomination entirely will be unsustainable in the long run, especially in an election year.

“When your best explanation is I’m not going to do my job because the Republican leader in the Senate told me not to, I don’t think that there are many Republican voters, let alone Democrats and independents, who are going to find that an acceptable explanation,” Earnest said. “I think that is why we’re going to continue to see the pressure on Republicans continue to ramp up.”

One of the most vulnerable Republican senators this year happens to represent Obama’s home state, where his speech Thursday will take place. Feeling the heat of a tough re-election campaign, Kirk met with Garland and urged his colleagues to do the same, called for a vote on his nomination and even said he’d consider voting for him.

If Garland gets a hearing, it’ll be because of political pressure like that.

### 2NC – Grassley/McConnell – \*\*\*Must Read\*\*\*

#### Discharge petition bypasses the Judiciary Committee---means Grassley or McConnell opposition is irrelevant---PC is key to win the floor vote

John Gizzi 4/7 is chief political columnist and White House correspondent for Newsmax, "Democrats Could Force Vote on Garland", 4-7-2016, Newsmax, http://www.newsmax.com/John-Gizzi/Congress-Garland-Judiciary/2016/03/31/id/721618/, DOA: 4-7-2016, y2k

There were ominous signs Wednesday that Senate Democrats were planning to force a vote on the nomination of Merrick Garland to the Supreme Court.

The little-used procedure works this way: Under Senate rules, a motion could be offered by any senator to discharge Garland’s nomination from the Judiciary Committee. It would take a simple majority — all 46 Democratic senators and four Republicans, with Vice President Joe Biden casting the tie-breaking vote — to move the Senate to executive session. Eventually, it would take 60 votes in the Senate to bring the nomination to an up-or-down vote.

As three Senate Republicans declared that they planned to meet with Garland and preferred a vote on his nomination to succeed the late Antonin Scalia on the Supreme Court, Senate Judiciary Committee Chairman Chuck Grassley, R-Iowa, said that the Senate might be forced to vote on Garland if Democrats deploy the rarely-used “motion to discharge” to bring his nomination to the Senate floor.

“There’s nothing we can do about it,” Grassley told a town meeting in Iowa, “Under the rules of the United States Senate, the resolution can be offered anytime.” For its part, the White House denied even knowing about the discharge process before Grassley’s remarks.

#### Even if McConnell doesn’t cave now, sustained electoral pressure key to democratic win—plan hurts Obama’s push which prevents it

Dovere and Gerstein 3/13- correspondents for Politico (Edward-Isaac and Josh, “White House preps Supreme Court battle plan”, Politico, 3/13/16, http://www.politico.com/story/2016/03/white-house-supreme-court-220691)//WK

But the White House is proceeding carefully, feeling that the politics work best for them if they're able to keep the focus on Republican obstructionism. “It’s going to be largely about the person, so it’s up to us to be as serious and dogged about how we present that person to the country,” a White House aide said. Top aides remain optimistic that McConnell will ease his blockade, but right now there’s zero indication Republicans plan to back down. With that in mind, the administration is prepared for the fight to become more about ramping up embarrassment for Republicans up and down the ballot going into November, hoping they can help elect a Democratic president and more Democrats to the Senate, who would then fill the seat in January.

#### Electoral pressure solves

Fabian 3/1- correspondent for The Hill (Jordan, “Republicans rebuff Obama in meeting on SCOTUS nomination”, The Hill, 3/1/16, http://thehill.com/homenews/administration/271286-no-signs-of-breakthrough-in-scotus-stalemate)//WK

Obama and his allies are hopeful that Senate Republicans will back off their stance under pressure from politically vulnerable senators who are facing scrutiny at home over McConnell’s refusal to consider a nominee. Grassley himself faces reelection in November and is expected to cruise to victory. But former Iowa Lt. Gov. Patty Judge (D) announced last week she is considering challenging the longtime senator, a sign his Supreme Court stance could cause political difficulties in his home state. That argument could be amplified if Donald Trump emerges as the Republican Party’s inevitable presidential nominee after Super Tuesday primary contests. “Kind of amusing, the GOP is making their vulnerable incumbent senators walk a plank on SCOTUS in the hope that Trump might get to pick,” tweeted former Obama senior adviser Dan Pfeiffer.

### 2NC – More Cards – GOP

#### GOP is under pressure---will cave in for the nomination

Michael McAuliff 4/5 Senior Congressional Reporter, The Huffington Post, "Republican Has Glowing Praise For Obama's High Court Choice", 4-5-2016, http://www.huffingtonpost.com/entry/susan-collins-merrick-garland-praise\_us\_5703eaf7e4b083f5c609005a, DOA: 4-6-2016, y2k

Sen. Chuck Grassley (R-Iowa), the chairman of the Senate Judiciary Committee, initially backed McConnell by saying he’d refuse to hold meetings and hearings with Garland. But after facing pressure from voters in Iowa and from Democrats, he has now agreed to talk to the judge.

Collins declined to predict whether the growing momentum to sit down with the Supreme Court nominee would lead to hearings, but suggested that Grassley’s new willingness to meet with Garland was a sign.

“Let’s see if after that meeting, Sen. Grassley still holds to the position that there should not be hearings,” Collins said.

Sen. John Boozman (R-Ark.) is meeting with Garland later Tuesday. That comes after Sen. Mark Kirk (R-Ill.) met with him last week, which makes it a total of three GOP senators who will have met with Obama’s court pick thus far.

White House press secretary Josh Earnest said Tuesday that he expects more Republicans to agree to at least sit down with Garland.

“I would anticipate that there will be additional meetings with additional Republican senators over the next couple of weeks,” Earnest said during his daily briefing. “There are still a dozen or so other senators … who have also indicated an openness to a meeting.”

#### GOP fissure now

Steve Benen 3/25, "New fissures emerge in Senate Republicans' Court blockade", 3-25-2016, MSNBC, http://www.msnbc.com/rachel-maddow-show/new-fissures-emerge-senate-republicans-court-blockade, DOA: 4-6-2016, y2k

The arithmetic on the Senate Republicans’ Supreme Court blockade certainly leans in the party’s favor. The GOP conference has a 54-member majority. If there’s a filibuster against Judge Merrick Garland, as seems likely, he would need 60 votes to have a chance at confirmation.

Are there 14 Republican senators who might break ranks and join with 46 Democrats to advance Garland’s nomination? Objectively, it’s difficult to imagine such circumstances – so long as the far-right GOP conference sticks together, linking arms on a gambit never before tried in American history, odds are Republicans will succeed in blocking the same Supreme Court nominee some GOP senators urged President Obama to choose.

But as the process continues to unfold, there’s at least some evidence that Republicans are not yet united. The Washington Post reported yesterday:

A third Republican senator broke with party leadership this week to say that Supreme Court nominee Merrick B. Garland ought to be granted hearings, according to a news report.

The Garden City Telegram reported that Sen. Jerry Moran (R-Kan.) told a small group gathered in a Cimarron, Kan., courthouse on Monday that GOP senators “should interview Garland and have a hearing on his nomination,” in the paper’s words.

According to the local report, Moran said he expects to oppose Garland’s nomination, but the senator nevertheless believes “the process ought to go forward.” In a separate local report, the Kansas Republican was also quoted saying, “I think we have the responsibility to have a hearing, to have the conversation and to make a determination on the merit.”

Before yesterday, only Sens. Susan Collins (R-Maine) and Mark Kirk (R-Ill.) had endorsed confirmation hearings for Garland. Moran, a former chairman of the National Republican Senatorial Committee who also happens to be up for re-election this year, has joined a very small club.

Keep in mind, there are basically three elements of the GOP strategy: (1) no one-on-one meetings with Garland; (2) no Senate Judiciary Committee hearings to consider Garland; and (3) no confirmation votes on Garland’s nomination. We’ve seen some cracks in the Republicans’ facade on the first point, with 12 of the 54 GOP senators saying they’re willing to pay Garland the courtesy of an informal conversation, if only to tell him that they plan to crush his nomination.

This second point represents a far more difficult hurdle, but few would have expected Moran, representing one of the nation’s reddest red states, to publicly endorse hearings, so perhaps there’s more fluidity to the blockade than previously believed. (Moran is not, by the way, a member of the Judiciary Committee, and he has no influence over whether or not the panel schedules a hearing.)

#### GOP is fracturing

Everett and Kim 3/16- political correspondent for Politico (Burgess, “GOP Sen. Ayotte will meet Obama's Supreme Court pick”, Politico, 3/16/16, http://www.politico.com/story/2016/03/kelly-ayotte-to-meet-merrick-garland-220868#ixzz435ID0E5T)//WK

After moving largely in lock-step behind McConnell's plan to block any Obama nominee, no matter who it was, Wednesday found the GOP's messaging increasingly frayed. While Grassley stuck to his guns, a host of Senate GOP moderates, purple-state Republicans up for reelection, and at least one other conservative senator said they would sit down with Garland — an indication that Democrats said shows their aggressive pressure campaign against Republicans is working. Sen. Kelly Ayotte (R-N.H.), an at-risk incumbent who’s been hammered by Democratic opponent Maggie Hassan over the Supreme Court blockade, said she would meet with Garland. Though that was a break from a previous stance against even meeting with a hypothetical nominee, Ayotte wouldn’t budge on opposing a confirmation vote and left the door only slightly cracked for a lame-duck confirmation. “My position is that we should allow the American people to weigh in,” Ayotte said. “And so I think we should see what the outcome and what direction the people of this country would like to take.” Sen. Rob Portman (R-Ohio), who like Ayotte faces a tough election and had opposed a meeting with a nominee before Garland was named, also said he’d sit down with Garland if asked. He said through a spokesman, however, that he would not move beyond that courtesy and still opposes confirmation. GOP Sen. Susan Collins, who helped confirm Garland to the D.C. Circuit in 1997, said she would “very carefully” review the judge’s record in the 19 years since the vote. White House officials reached out to the moderate Mainer this week to see if she would meet with Garland; Collins said yes and said she will do so following the two-week Senate recess that begins next week.

#### SCOTUS nomination will pass—Obama push and congressional focus key

Dovere 2/26- political correspondent for Politico (Edward-Isaac, “Obama's GOP Supreme Court whip list”, Politico, 2/26/16, http://www.politico.com/story/2016/02/obama-supreme-court-senate-republicans-219838)//WK

Still, depending on the day, the White House can sometimes see a path. The Republicans “face an existential question about either protecting their majority or watching Obama replace,” Justice Antonin Scalia, who died last weekend, said one senior Democrat familiar with some of the thinking. “If you play it all the way out, they make it easier for there to be a Democratic majority and Democratic president in January.” More broadly, the administration is hoping to focus the debate on the rules of the process, and the nominee, trying to steer away from the political fight. If they can make this about regular order in Washington and the Senate and the actual person being discussed, they think they get to hearings, and the hearings get them to the filibuster vote. If they can get that far, lining up five Republicans to give him the 51 votes for a simple majority to get confirmation would be almost easy, at least compared to breaking the filibuster. Aides and allies say they know that Obama needs to pick quickly enough to keep Republicans from cementing the narrative that this is impossible, but slowly enough that the president looks deliberative. “It is important that he get it right,” said Sen. Tim Kaine (D-Va.), a reliable White House ally, “but he should move with some dispatch.” The coming fight may have already claimed one casualty: What was left of Obama’s congressional agenda — including the criminal justice reform push that’s very close to his heart — might now be dead, given the knock-down drag-out battle that’s coming. Obama’s advisors think the Supreme Court fight is worth it. If they were somehow able to confirm a replacement for Scalia, and shift the balance of the court away from conservatives, it would be an achievement for the president’s legacy right up there with Obamacare. But the White House wasn’t prepared, in terms of staffing or psyche, to spend the spring taking on Congress. Just this week, they were caught by surprise by the old, 19912 C-SPAN clips of Vice President Joe Biden arguing that Supreme Court justices shouldn’t be confirmed in election years, a soundbite that Republicans gleefully latched on to. They’re rushing to catch up, pushing a narrative of obstruction they can hope links up with a Republican Party that’s on the brink of having Donald Trump as its presidential candidate, hoping to capitalize on public and political pressure on senators back home to make them crack. “I think the thing that's really taken a beating this week is the public perception of Senate Republicans’ work ethic,” said White House press secretary Josh Earnest Thursday, connecting the preemptive refusal to move on a Supreme Court nominee to Republicans’ refusal to hold budget hearings, postponing their own budget and Alabama Sen. Richard Shelby putting off Senate Banking Committee confirmations until after his primary. “Democratic voters and Republican voters elect people to represent them in Washington, and they expect those representatives to do their job,” Earnest added. “And this week, there’s not much evidence to point to that Republicans are doing their job. There’s plenty of evidence to point to that they’re not doing their job.” Any major Democratic offensive will have to wait for Obama to actually make his Supreme Court pick. Once that’s done, aides will build a full outreach and media strategy — staging photo ops of the nominee sitting outside the offices of Republicans refusing to meet could be an option. But how much the White House can try moves like that depends on the nominee’s current position and personality. Obama could also use the bully pulpit to chastise Republicans, though quieter one-on-one conversations leaning on a few Republicans to minimize the politics and keep the focus on the nominee is more in line with their expected approach. Keeping the attention on the nominee, Obama aides think, helps get them to hearings. Getting to hearings, which will only raise the profile of the nominee and force the Republicans to be on camera voicing their opposition, they think, gets them a committee vote and onto the Senate floor, where the whip list comes in.

### 2NC – Vote Count

#### Obama can get to 51 votes---here’s a magic evidence

Studebaker 2/14, (PhD in Politics and International Studies at the University of Cambridge. My research focuses on economic inequality and democratic theory. I got my BA in Politics from the University of Warwick in 2013 and my MA from the University of Chicago in 2014, How Obama Can Replace Scalia, benjaminstudebaker.com/2016/02/14/how-obama-can-replace-scalia/)

In 2015, he dissented in Obergefell v. Hodges, arguing that states are entitled to deny LGBTs marriage rights. President Obama does not leave office until January 20. This means that Obama has 11 months to nominate a new Supreme Court justice and get that nominee confirmed. If you’re wondering whether this gives him enough time, the answer is probably yes. Since 2000, it has never taken a president more than 6 months from the date of retirement or death to get a justice replaced, and the last justice to die in office–William Rehnquist–was replaced in just one month: Scalia Replacement However, all of these justices were replaced with the president’s party controlling a majority in the senate. Supreme Court nominees require 50 votes. While it remains technically legal for a Supreme Court nominee to be filibustered (in which case 60 votes are required to override), no Supreme Court nominee has ever been subject to a filibuster. Currently the democrats have 44 seats in the senate, with 2 independents that both caucus with the democrats. This means they can rely on 46 votes. This means they would need 4 more votes–if they can get to 50, Vice President Biden can break a tie. Barack Obama’s past court nominees have each received a few republican senate votes. Elena Kagan got the support of 5 republicans, while Sonia Sotomayor got the support of 9. However only three of those republicans remain in the senate today. They are: Lindsey Graham (R-SC), who recently withdrew from the presidential race and voted to confirm both Sotomayor and Kagan. Susan Collins (R-ME), who voted to confirm both Sotomayor and Kagan. Lamar Alexander (R-TN), who voted to confirm Sotomayor but opposed Kagan. All three of these republicans were re-elected in 2014 and do not have to fear challenges from the right in primaries until 2020. Collins is said to be considering a run for governor of Maine in 2018. Maine has been a blue state in presidential elections since 1988 and Collins has a reputation for being a moderate. In 2014 she was re-elected with 68% of the vote. It is reasonably likely that Obama could potentially get the support of these three. If so, that would bring his vote total up to 49. He would need one more republican. Who are the most likely republicans to defect? I’ve drawn up a short list of republicans who have developed relatively moderate reputations since 2010: Kelly Ayotte (R-NH) was elected in 2010. Ayotte is up for re-election this year, but she’s running in the state of New Hampshire, which has been blue in presidential elections since 2000. That said, she overcame a contentious primary in 2010 against a Tea Party rival, and may be unwilling to risk another challenge. Mark Kirk (R-IL) was also elected in 2010. He has also worked across the aisle on environmental policy. He will be campaigning for re-election in Barack Obama’s home state, which has been blue since 1988. In 2010 he won a narrow victory over his democratic opponent, and since he’s running for re-election in a presidential year when Illinois democrats are likely to come out in force for their nominee, this might be a good opportunity for him to endear himself to them. Lisa Murkowski (R-AK) was re-elected in 2010 by write-in vote after her party rejected her in favor of a Tea Party candidate in the primaries. This has made her fearless and much more willing to deviate from the party line. Dean Heller (R-NV) was elected in 2012. Like Kirk, he won a narrow victory over a democrat and this forces him to play to the middle. Unlike Kirk, he is not up for re-election until 2018 and will have more flexibility to vote as he pleases. If Obama can get Graham, Collins, and Alexander on side, he needs just one more of these four. However, politics is changing and becoming more polarized. If things work the way they have historically, Obama has a strong chance of getting a reasonably left leaning nominee narrowly confirmed. Given that we are dealing with the senate rather than the house, *there’s a good chance Obama can find the votes*. But if the republicans are willing to violate hundreds of years of precedent and obstruct a nominee with a filibuster, or if senate republicans are much less willing to cooperate with the president than they were in 2010, things could remain unresolved for some time. That said, it would be a risky move for senate republicans, because a protracted fight could be used by the democratic nominee in the 2016 presidential race to highlight republican obstructionism. In the meantime, any Supreme Court decisions that are 4-4 result in no ruling being issued–the lower court’s rulings are instead upheld.

### 2NC – AT: After Election

#### Vote will be soon

Mike Debonis 3/28, "Senate Democrats propose April hearings, May votes on Garland confirmation", 3-28-16, Washington Post, https://www.washingtonpost.com/news/powerpost/wp/2016/03/28/democrats-propose-april-hearings-may-votes-on-garland-confirmation/, DOA: 4-7-2016, y2k

If Senate Democrats have their way, Supreme Court nominee Merrick B. Garland would sit for confirmation hearings starting in late April and receive an up-or-down vote on the Senate floor about a month later, just before Memorial Day. That is the timeline proposed in a letter sent Monday to Republican leaders by Democratic members of the Senate Judiciary Committee.

#### Discharge petition bypasses the committee---floor vote will be quick

John Gizzi 4/7 is chief political columnist and White House correspondent for Newsmax, "Democrats Could Force Vote on Garland", 4-7-2016, Newsmax, http://www.newsmax.com/John-Gizzi/Congress-Garland-Judiciary/2016/03/31/id/721618/, DOA: 4-7-2016, y2k

There were ominous signs Wednesday that Senate Democrats were planning to force a vote on the nomination of Merrick Garland to the Supreme Court.

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“There’s nothing we can do about it,” Grassley told a town meeting in Iowa, “Under the rules of the United States Senate, the resolution can be offered anytime.” For its part, the White House denied even knowing about the discharge process before Grassley’s remarks.

### 2NC – AT: Garland Unpopular

#### Garland is a consensus nominee---no backlsah

Mike Dorning, Greg Stohr, Steven T. Dennis 16, "Obama’s Choice of Garland for Court Tests Republican Obstruction", 3-16-2016, Bloomberg, http://www.bloomberg.com/politics/articles/2016-03-16/obama-said-to-choose-garland-for-scalia-s-supreme-court-vacancy, DOA: 4-6-2016, y2k

Barack Obama challenged Senate Republicans’ obstruction of a Supreme Court appointment by offering a nominee they would probably welcome from a Democratic president in a less volatile political environment.

Merrick Garland, the 63-year-old federal appeals court judge that Obama chose, is the most moderate and oldest of the finalists the president considered. His nomination highlights White House charges of Republican intransigence and partisan gridlock. The Senate president pro tempore, Republican Orrin Hatch of Utah, once recommended Garland for the court.

Obama passed over candidates with more potential to tilt the court decidedly to the left, including federal appeals court judges Sri Srinivasan, who would have been the first Asian-American justice, and Paul Watford, an African-American. Their confirmation battles could have energized core Democratic voters.

The Republican opposition showed a few cracks immediately after Obama announced Garland’s nomination, though party leaders reiterated their vow not to consider any Obama pick. Republicans Jeff Flake of Arizona, Kelly Ayotte of New Hampshire and Susan Collins of Maine all said they would at least meet with Garland when he begins visiting with senators on Thursday, breaking with their party leaders. Mark Kirk of Illinois said he would consider Garland.

Collins also called for a confirmation hearing and Hatch said he would "probably" support confirming Garland after the November presidential election, should a Democratic candidate win.

Flake too said he "would be open" to confirming Garland under that scenario.

“I am concerned about the direction of the court,” Flake told reporters Wednesday afternoon. “And faced with the choice" between “putting Garland on the court or a pick by Hillary Clinton, I would go for Garland.”

Garland will head up to Capitol Hill Thursday to meet with Senate Minority Leader Harry Reid and the ranking Democrat on the Senate Judiciary Committee, Patrick Leahy of Vermont, according to White House spokesman Eric Schultz. Judiciary Chairman Chuck Grassley, an Iowa Republican, has agreed to meet with Garland after the Senate’s upcoming two-week recess, Schultz said.

’Consensus Nominee’

Obama said in the White House Rose Garden on Wednesday that Republican senators had recommended Garland to him each of the three times a seat had opened on the court in his presidency. The White House circulated a 2010 news account in which Hatch had declared that Garland would be a "consensus nominee."

"I simply ask Republicans in the Senate to give him a fair hearing and then an up or down vote,” Obama said with Garland by his side. “If you don’t, it will not only be an abdication of the Senate’s constitutional duty, it will indicate a process of nominating and approving judges that is beyond repair."

The nomination intensifies an unprecedented dispute between the White House and Senate Republicans that will dominate the final 10 months of his presidency. Republican leaders say a replacement for the late Justice Antonin Scalia, with the potential to swing the court’s ideological majority, should be decided by Obama’s successor.

#### Garland=bipartisan—pushed by senior GOP judiciary members

Fabian 3/16- correspondent for The Hill (Jordan, “Obama to nominate Merrick Garland to Supreme Court: report”, The Hill, 3/16/16, http://thehill.com/homenews/administration/273208-obama-nominates-merrick-garland-to-supreme-court)//WK

The 63-year-old judge has built a reputation as a moderate who is well-liked by Republicans. His professional resume is similar to many justices already on the high court. The judge has proven to be confirmable in a Republican-controlled Senate. The upper chamber in 1997 voted 76-23 to confirm him. Thirty-two Republicans joined the majority, seven of whom are still in office. The D.C. Circuit has long been considered a stepping stone to the high court. Three current justices — as well as Scalia — served there previously. A Chicago native, Garland, was a top contender for the last Supreme Court opening in 2010, which Obama ultimately filled with his then-solicitor general, Elena Kagan. Sen. Orrin Hatch (R-Utah), a senior member of the Judiciary Committee, said at the time he would help Garland get confirmed if he was nominated. "I have no doubts that Garland would get a lot of [Senate] votes,” Hatch, a former chairman of the panel, told Reuters. “And I will do my best to help him get them. Garland’s experience is appealing to members on both sides of the aisle. He clerked for Supreme Court Justice William Brennan, who was appointed by Republican President Dwight Eisenhower but went on to lead the court’s liberal wing, and Second Circuit Court of Appeals Judge Henry Friendly, another Eisenhower appointee under whom Chief Justice John Roberts also clerked. During his service as a federal prosecutor, he oversaw cases involving the 1995 Oklahoma City bombing and the Unabomber, Ted Kaczynski.

### 2NC – AT: Hatch

#### Hatch will cave—previous statements on Garland

Dovere et al. 3/16- correspondents for Politico (Edward-Isaac, Sarah Wheaton, Seung Min Kim, “Obama to pick Merrick Garland for Supreme Court”, Politico, 3/16/16, http://www.politico.com/story/2016/03/obama-to-announce-supreme-court-pick-at-11-am-220851#ixzz434ujAywl )//WK

Garland, 63, currently serves as the top judge on the influential D.C. Circuit. He's widely admired by Democrats and Republicans alike, although he wasn't unanimously confirmed for his current post. Utah’s Sen. Orrin Hatch, a key Republican on the Judiciary Committee, has urged Obama to nominate him for earlier Supreme Court vacancies.

#### Garland overwhelms their coalition

Campos 3/16- professor of law at the University of Colorado at Boulder (Paul, “Obama’s gutsy “Godfather” move: Merrick Garland nomination is as big a GOP nightmare as Donald Trump”, Salon, 3/16/16, <http://www.salon.com/2016/03/16/obamas_gutsy_godfather_move_merrick_garland_nomination_is>

\_as\_big\_a\_gop\_nightmare\_as\_donald\_trump/)//WK

In “The Godfather II,” the Corleone family lawyer Tom Hagen describes to his brother Michael how they’ve been tactically outmaneuvered by the old gangster, Hyman Roth. “Roth . . . well he — he played this one beautifully,” says Hagen, with more than a little grudging admiration. Assuming they’re not throwing themselves out some of the higher windows in the Senate office building, a lot of Republican senators must be having similar thoughts about Barack Obama. Obama’s decision to nominate Merrick Garland to the Supreme Court is what in technical legal terms is known as a gangster move. It puts Senate Republicans in a basically impossible position – as if the 24 GOP senators up for re-election this November didn’t already have enough problems, what with the ticket almost certain to be headed by a full-fledged disaster of a presidential candidate. (It’s actually hard to say whether Donald Trump or Ted Cruz is less electable, but either of them is basically a worst-case scenario for down ticket GOP candidates.) Consider: Just a half-dozen years ago, Orrin Hatch, perhaps the single most influential Republican senator in regard to judicial nominations, declared that Merrick would be “a consensus nominee,” and that furthermore there was “no question” that he could be confirmed. Under normal circumstances, the choice of a thoroughgoing judicial moderate such as Merrick would be considered by Republicans a best-case nomination by a Democratic president – hence, Hatch’s eagerness to see him picked for the open seat that went eventually to Elena Kagan. But these aren’t, to put it mildly, normal circumstances. Republican senators have agreed almost unanimously that they won’t consider anyone nominated by Obama this year, on the basis of the constitutional principle (like a lot of GOP constitutional principles, this one isn’t actually in the Constitution, and indeed has heretofore never been enforced, or even articulated) that a president shouldn’t try to fill a Supreme Court vacancy in a presidential election year. Obama’s nomination puts these senators in a terrible bind. If they carry through with their we-just-made-it-up-on-the-spot principle, and refuse to even give an indisputably moderate nominee such as Garland a hearing, they will look like petty obstructionists to swing voters in their home states (engaging in petty obstruction tends to be the kind of thing that makes you look like a petty obstructionist). On the other hand, if they relent and hold hearings, the pressure to actually confirm Garland will build, since the only argument against confirming him will be, essentially, that he’s not Antonin Scalia reincarnated.

#### Fear of trump forces GOP concessions

Dovere 3/2- correspondent for Politico (Edward-Isaac, “Dems: Trump may get us a SCOTUS win”, 3/2/16, Politico, http://www.politico.com/story/2016/03/trump-obama-supreme-court-win-220126#ixzz41mVVjZDM)//WK

For Democrats, that’s where Trump comes in. They’ll lean especially hard on senators up for re-election this year, including the five seen as the most vulnerable, but also on McConnell and the rest of the Republican conference, trying to frame the battle as a choice between signing on to Trump’s agenda and proving that they’re different kinds of Republicans by fulfilling their basic governance duties and confirming a nominee. Sen. Chuck Schumer (D-N.Y.) told reporters on Tuesday that the "fault lines" inside Republican Party — hardline conservatives versus more moderate, mainstream lawmakers — are being exposed by Trump's ascension. And the fallout from that tectonic shift may play out everywhere, including the Supreme Court fight, Schumer believes. "They're in disarray. The hard right has pulled them in a direction that is not where the American people are. All the fracture lines that they could sort of paper over in the past, they can't paper over now," Schumer said. "McConnell tried to get away from them [hardline conservatives] in December [with a budget deal.] The presidential election, the Supreme Court vacancy, just pulled them right back there." "They're a lot of cracks that have become deep, deep fissures” due to Trump, Schumer added. Katie McGinty, running in Pennsylvania against Sen. Pat Toomey, one of the five vulnerable GOP incumbents, said she’s eager to make the connection. “With the Supreme Court vacancy already weighing on Toomey's reelection prospects, Donald Trump as the Republican nominee will be a further drag on Toomey,” McGinty said. They won’t be alone. From the White House on down, it's an argument that Democrats are eager to make. “There’s no question that if Trump is at the top of the ticket, the Senate Republicans are facing a governing test,” said a senior Democrat familiar with the thinking. “Confirming a nominee would be the best way to show they’re not like Trump.” Trump’s strong showing on Tuesday plays to their advantage, Democrats say. With so many delegates stacked up, he won’t be out of the race anytime soon. And the longer he stays in, the more likely it is he’ll make more controversial comments. In the meantime, Obama will put forward a name, and Democrats will have a tangible nominee to rally around — they’re already talking about public relations ploys like mock Senate hearings to highlight the GOP’s refusal to even have courtesy meetings with any Obama pick. “The only issue likely to break through in the Senate this year is the Supreme Court fight, so if Republicans want to create daylight between themselves and Trump, confirming a qualified nominee is the way to do it,” said Adam Jentleson, a deputy chief of staff to Reid.

### 2NC – AT: Lame Duck/No PC

#### Obama political capital on nominations now

Mufson, Washington Post Reporter covering White House, 2-20-16

[Steve, Washington Post reporter on the White House but also covered economics, China, foreign policy and energy, “Obama’s final year in office shaping up to be one of genuine relevance,” <https://www.washingtonpost.com/business/economy/obamas-final-year-in-office-shaping-up-to-be-one-of-genuine-relevance/2016/02/20/7b047fee-d5c3-11e5-9823-02b905009f99_story.html>, 2-20-16, access date: 2-21-16, MAY]

It was not so long ago that many observers were arguing that it was time to slide Barack Obama’s presidency onto the bookshelf labeled “history.” The president’s political capital seemed spent, and the man himself seemed tired. He looked and sounded like a lame duck. Then, bam! A confluence of events has conspired to keep the president not just relevant but also vital, even as the campaign to replace him intensifies.The unexpected Supreme Court vacancy, a historic trip to Cuba and a deeply unsettled presidential primary campaign all promise to keep the president at the center of Washington politics and policy debate deep into his final year in office.The president seems to be relishing his continued place in the spotlight. He is doling out media interviews and holding forth at length on a wide range of topics. One moment, Obama is opining on Donald Trump’s odds of winning the election; another moment he is angling for a late-inning score on budget items and Puerto Rico debt restructuring; and another he is pondering a successor for the late Supreme Court justice Antonin Scalia. And deploying a bit of sports jargon, he has said that lots of things can happen in the fourth quarter. Only recently, many people were writing him off. “He starts his last year with a key goal: remaining relevant,” Reuters wrote on the eve of the State of the Union address. “Obama Reaches for Relevance With $4.1 Trillion 2017 Budget,” said a Bloomberg News headline recently. “Obama’s presidency now effectively over,” said a Washington Times headline. And as long ago as 2014, a Washington Post writer declared that “all that appears left for the Obama presidency is a narrowing of both vision and accomplishment.” The White House insists that Obama still has some fight left in him. The Supreme Court nomination may be the most consequential. The president has indicated that he wants a person with top credentials and someone who has withstood GOP scrutiny in an earlier confirmation for a court seat.The Cuba trip, too, could outlive his presidency if Obama can extract pledges to further open markets and transform the island nation into a more democratic place. And he still has a chance to do damage control on foreign issues, such as the war in Syria, for which Secretary of State John F. Kerry is seeking a cease-fire. But Obama still faces risks in his final year, above all on foreign policy, where he is in danger of becoming captive to what takes place on distant battlefields, conflicts that he will try to side-step. Those include the installation of Chinese missiles in the South China Sea, continuing Russian brinkmanship in Ukraine, chaos in Syria, and lingering troubles in Afghanistan and Iraq. The rightward drift in Israel hardly merits a mention. And at home, he could end up playing more defense on several key issues, such as the Clean Power Plan and the immigration executive order, which are working their way through the judicial system. Some have better chances with an incomplete Supreme Court, while others could fare worse. Many U.S. presidents have faded early from the political scene. President Woodrow Wilson suffered a stroke in late 1919, and his cherished League of Nations treaty was defeated shortly afterward. President Dwight Eisenhower’s final year was tarnished by the downing of a U-2 spy plane over the Soviet Union, though he left with a memorable farewell address about the “military-industrial complex.” President Lyndon B. Johnson won passage of fair-housing legislation, the Gun Control Act and a tax surcharge to balance the wartime budget, but these achievements paled next to the war news from Vietnam. “LBJ was a legislative wizard,” said Bruce Schulman, a history professor at Boston University. “By normal standards, he was successful on Capitol Hill as a lame duck, but compared to his earlier legislative success, not so much.” President Ronald Reagan, having survived the Iran-contra scandal, won confirmation for his Supreme Court nominee, Justice Anthony M. Kennedy. President George W. Bush watched his approval ratings tank — even before the financial crisis took hold. Others continued to pile up achievements until the very end. President Theodore Roosevelt created Muir Woods and the Grand Canyon national monuments and assured the election of his handpicked successor, William Howard Taft (though they later fell out). President Bill Clinton, bouncing back from impeachment the year before, tried and failed to forge a Middle East peace deal but managed to win passage of an unpopular trade package with China, granting it most-favored-nation status and making it a member of the World Trade Organization. And he protected a huge budget surplus. Schulman notes that only 13 American presidents have served eight consecutive years, including five of the first seven. But that list also includes four of the past five. “The last year has recently become a regular phenomenon we now must reckon with,” he said. As soon as the last midterm elections passed by, Obama seemed liberated. No longer worried about being spurned by his own party members running for election, Obama said he was not done. And a year later, he was reveling in a sense of surpassed expectations. Filling the empty Supreme Court seat plays right into some of Obama’s favorite themes: the meaning of the Constitution, the need to overcome the partisan divide, and the obstructionism of the Republicans. Whether that is enough is unclear. “So I just want to point out I said at the beginning of this year that interesting stuff happens in the fourth quarter, and we are only halfway through,” he said in December. “I’m going to leave it out all on the field.” With the Supreme Court nomination, Obama could be looking at a two-minute drill in which he advances steadily with short-yardage plays, or he could be about to throw a Hail Mary. Where it would land is anybody’s guess.

### 2NC – AT: Recess Appointment

#### Obama won’t use recess appointment

Phillips, Washington Post Politics Reporter, 3-21, 2016, (Amber, "How Obama could appoint Merrick Garland to the Supreme Court, and why it’ll never happen," Washington Post, PAS) <https://www.washingtonpost.com/news/the-fix/wp/2016/03/21/how-obama-could-appoint-merrick-garland-to-the-supreme-court-and-why-itll-never-happen/> 3-30-16

On Sunday, we gamed out four scenarios that could, however unlikely, put Judge Merrick Garland on the Supreme Court this year. The scenarios centered on Senate Republicans, for one political reason or another, changing their minds and reversing course from their blockade of even considering President Obama's nominee. But there is actually a fifth scenario: a recess appointment. Here, the impetus for action would sit with Obama, who could wait until the Senate breaks for at least 10 days and then jump over Congress entirely by appointing Garland to the bench unilaterally. If it sounds far-fetched, that's because it is. Such a scenario would only occur if a Democratic president won but Republicans held the Senate. And even then, a recess appointment would raise so many prickly practical, legal and political questions (many of which we'll outline below) that you could argue that the drama wouldn't be worth it for Obama or his successor. We should also note that Obama has shown zero inclination to exercise this option. When Justice Antonin Scalia died suddenly in February, the Senate was in the middle of a 10-day recess. Obama officials said then the president had no plans to push through a nominee during the Senate's recess. But as we wrote Sunday, never say never. Plus, several of our readers asked whether this could be a scenario that could put Garland on the court. The answer is yes, with a whole bunch of caveats. So here's how it would work — and why it probably won't happen. Yes, Obama has the authority for a recess appointment There's actually a "Recess Clause" in the Constitution (Article II Sec. 2) that reads: “The President shall have Power to fill up all Vacancies that may happen during the Recess of the Senate, by granting Commissions which shall expire at the End of their next Session." And this has been used before. In 1956, President Dwight D. Eisenhower used that authority to appoint William Brennan to the Supreme Court less than a month before the presidential election. A few years before that, he had appointed Chief Justice Earl Warren to the court when the Senate was in recess. In both cases, the Senate later confirmed those justices. But the courts have made it more difficult Obama has made recess appointments before that have come back to bite him (though none to the judicial branch). In 2014, the Supreme Court overturned Obama’s three recess appointments to the National Labor Relations Board. In doing so, the court gave the Senate a wide latitude to decide when it considers itself to be in recess and when it's out. Today, a recess has to last at least 10 days before the president can legally make an appointment. The court also okayed the Senate's use of "pro forma" sessions, which are aimed at preventing a president from making recess appointments. In a pro forma session, the Senate can gavel into Congress for as little as a few minutes — with no legislative business being conducted — and claim it has been in session. And the Senate is indeed expected to stay in either actual session or a pro forma session for the rest of the year, given the high-stakes vacancy on the Supreme Court. Case in point: The Senate is actually technically on a 10-day break right now; almost all lawmakers are back home. But Senate Majority Leader Mitch McConnell (R-Ky.) has asked a few senators to stay behind or travel back to Washington to bang the gavel every few days, ensuring that the Senate is, technically, in session. All eyes would turn to January The most likely time for Obama to make a recess appointment would be in January, when there's a new session of Congress. Josh Chafetz with Cornell Law says that there's a conceivable legal opening for the president to appoint someone to the court when the old Congress is on its way out and the new Congress on its way in. In 1903, President Theodore Roosevelt made some 160 recess appointments while the Congress was switching from old to new, even though it was out of session only briefly. It's unclear whether the 10-day requirement includes Congress's switch in January, Chafetz said. And this would only work if the politics were just right The politics to make a recess appointment feasible would have to be a perfect storm as well. If Obama is handing the White House over to a Republican, there's no point for him to make an appointment, since the new president could simply nominate someone else. Obama would likely only have incentive to make a recess appointment if he knew Republicans were in control of the Senate and Hillary Clinton was about to enter the White House. Maybe then he'd calculate that this brief moment in January will be his and Clinton's only window to fill the vacancy. Adding to all the uncertainty is the fact that recess appointments are temporary: A justice installed in a recess appointment can only serve until the end of the next session of Congress (unless the Senate gavels back into session and agrees to confirm the justice), so a January 2017 appointment would serve until January 2019. Plus, Obama basically blowing off Congress in his final days on one of the most hotly contested political issues of the day would be like launching a grenade at a party and then walking away; it would pretty much destroy what little working relationship Democrats and Republicans have going forward — probably not something a Democratic president-elect like Clinton would want. "It's hard to imagine Obama would want that hornet's nest on his way out of office for the relatively limited benefit he would get," Chafetz said. We repeat that Obama has given no indication he'd be open to such a divisive move. After all, he has nominated a moderate judge, suggesting he wants to work with Republicans rather than over them. All that is why a recess appointment is the least likely scenario we can envision to put Garland on the court. But it was fun to game this all out to better understand why.

#### No recess appointment

Mike Debonis 2/17 "Senate Republicans still divided over strategy for an Obama court nominee", 2-17-16, Washington Post, https://www.washingtonpost.com/politics/white-house-officials-obama-could-use-recess-appointment-to-fill-scalia-seat/2016/02/17/75b0d1be-d5b9-11e5-be55-2cc3c1e4b76b\_story.html, DOA: 2-19-2016, y2k

Under a unanimous 2014 ruling, the Supreme Court gave broad discretion to the Senate when it came to defining a recess. The president can still make recess appointments when the Senate is away, but recent congressional leaders have foreclosed that possibility by scheduling brief pro forma meetings that keep the Senate in session.

## Thumpers

### 2NC – Thumpers – Top Level

#### Prefer issue specific uniqueness---their thumpers are already priced in to Obama’s PC---he still has sufficient PC to push---only new fights trade off

#### Nomination is the top priority

Mike Dorning, Greg Stohr, Steven T. Dennis 16, "Obama’s Choice of Garland for Court Tests Republican Obstruction", 3-16-2016, Bloomberg, http://www.bloomberg.com/politics/articles/2016-03-16/obama-said-to-choose-garland-for-scalia-s-supreme-court-vacancy, DOA: 4-6-2016, y2k

The nomination intensifies an unprecedented dispute between the White House and Senate Republicans that will dominate the final 10 months of his presidency. Republican leaders say a replacement for the late Justice Antonin Scalia, with the potential to swing the court’s ideological majority, should be decided by Obama’s successor.

#### Push now uniquely key

Wheaton and Gerstein 3/14- correspondents for Politico (Sarah and Josh, “Hill Democrats getting antsy waiting for Supreme Court pick”, Politico, 3/14/16, http://www.politico.com/story/2016/03/supreme-court-democrats-hill-220738#ixzz42vtJNG8S)//WK

Democrats on Capitol Hill are getting impatient with President Barack Obama’s deliberations over his Supreme Court nominee, fearing a delay beyond this week could signal a problem. The White House has refused to offer a specific timeline beyond promising to give the Senate “ample time” to advise and consent to the nominee before the high court’s next term starts in October. On Monday, press secretary Josh Earnest again said the nomination won’t necessarily come before Obama leaves on Sunday for his five-day swing through Cuba and Argentina. Senate Minority Leader Harry Reid said in an interview on Monday that he’s been “pushing to get it done.” Asked whether the nomination should come this week, Reid responded, “I want it last week.” Obama’s previous two Supreme Court searches “have taken about four to five weeks. We’re still in that four-to-five week window,” Earnest said, adding that he had no “internal deadlines to share.” Justice Antonin Scalia was found dead on Feb. 13, so that five-week window will close on Saturday — just after the Senate leaves town for a two-week recess. Earnest did not respond to a question about whether there was a problem with the vetting process. And any foot-dragging from the White House could also give Republicans an opening to advance a narrative that Obama is struggling to recruit a Supreme Court nominee who will almost inevitably be rejected by the Senate.

### 2NC – Thumpers – AT: CJR

#### No push for CJR---nomination first

Carl Hulse 4/7, "Garland Fight Overshadows Effort to Overhaul Sentencing Laws", 4-6-2016, New York Times, http://www.nytimes.com/2016/04/07/us/politics/garland-fight-overshadows-effort-to-overhaul-sentencing-laws.html, DOA: 4-7-2016, y2k

Members of the Senate always expected to be consumed by a major court­ related fight this year, just not the court­related fight they are having. A bipartisan overhaul of criminal justice laws was supposed to be a defining issue of this Congress, a rare unifying moment for Republicans, Democrats and President Obama. Instead, the members of the Judiciary Committee who wrote the criminal justice package are at war over whether to consider Mr. Obama’s nominee to the Supreme Court, Judge Merrick B. Garland. This feud over the nomination has overshadowed the effort to reduce mandatory minimum sentences and ease the transition from prison. Now supporters of an overhaul are worried about its fate, especially with the Senate about to turn to a series of time­consuming spending bills and the electionyear calendar approaching a point where little gets done that is not absolutely necessary.

### 2NC – Thumpers – AT: Defense Trade Secrets Act

#### Trade secrets bill is not controversial

Will Dobbs-Allsopp 16, "The Coming Week: Senate Could Move on FAA, Puerto Rico Talks Continue", 4-1-2016, Morning Consult, https://morningconsult.com/2016/04/senate-faa-puerto-rico-paul-ryan-wisconsin/, DOA: 4-7-2016, y2k

The Senate will vote Monday on the Defend Trade Secrets Act of 2016, which would enable civil litigation for the theft of international trade secrets. The measure is uncontroversial, with 64 co-sponsors. Right now, only the Justice Department can bring lawsuits for the theft of trade secrets. The bill would also institute a federal standard defining trade secret theft.

### 2NC – Thumpers – AT: FAA

#### FAA bill is uncontroversial

Will Dobbs-Allsopp 16, "The Coming Week: Senate Could Move on FAA, Puerto Rico Talks Continue", 4-1-2016, Morning Consult, https://morningconsult.com/2016/04/senate-faa-puerto-rico-paul-ryan-wisconsin/, DOA: 4-7-2016, y2k

After the trade secrets vote, the chamber could move to a bipartisan Federal Aviation Administration reauthorization bill, according to a McConnell aide, although nothing has been officially scheduled.

The FAA bill made it out of the Senate Commerce Committee last month in an amicable fashion on a voice vote. It would authorize funding through September of 2017. Transportation legislators, faced with an end-of-March deadline, already extended the FAA’s authorization through mid-July.

### 2NC – Thumpers – AT: Flint

#### Aid is bipartisan and Obama not pushing

Cama and Henry 3/10- correspondents for The Hill (Timothy and Devin, “Senators closing in on Flint aid deal”, The Hill, 3/10/16, http://thehill.com/homenews/senate/272410-senators-closing-in-on-flint-aid-deal)//WK

Key senators are in what they see as the final stages of negotiating an aid deal for Flint, Mich., and cities with water contamination problems. Sen. Mike Lee (R-Utah) is now the sole Republican senator with a hold on the legislation, preventing it from moving forward with unanimous consent. Lee’s spokesman said Wednesday that he and Sen. Debbie Stabenow (D-Mich.) have agreed on a general path forward to resolve a budgeting problem with the $250 million package of infrastructure and health programs for cities with water contamination issues. But they’re waiting for the Congressional Budget Office (CBO) to bless the deal. “There has been some progress,” Lee spokesman Conn Carroll said. “Sen. Stabenow has come a long way toward agreeing to our ask.” Resolving Lee’s objection would lead to passage of the bipartisan measure, the Senate’s major response to the ongoing crisis in Flint caused by a state-overseen switch of its water system that introduced lead contamination to the drinking water, among other problems. Lee’s objection centers on when the aid package would be paid for. Senators agreed to use money from the Energy Department’s Advanced Technology Vehicle Manufacturing program, but haven’t decided when the funds would be rescinded. Details on how best to do that are being worked out with the CBO. Last week, Lee’s problems were more ideological in nature. He called the measure an unnecessary expansion of federal authority over water systems and said “the only thing Congress is contributing to the Flint recovery is political grandstanding.”

### 2NC – Thumpers – AT: FOIA

#### No thumper—it’s bipart and Obama didn’t push

Trujillo 3/15- correspondent for The Hill (Mario, “Senate passes FOIA reform bill”, The Hill, 3/15/16, http://thehill.com/policy/technology/273115-senate-passes-foia-reform-bill)//WK

The Senate on Tuesday unanimously passed a bill to expand the public's access to government records, after a year of delay. The Senate's move means both chambers have now passed similar proposals to strengthen the Freedom of Information Act (FOIA). Differences will still need to be resolved before the measure makes it to President Obama's desk — potentially forcing the administration's hand on a bill it has previously lobbied against. "If the president receives this bill, he'll sign it," Sen. Patrick Leahy (D-Vt.) told The Hill. When pressed on whether he had received assurances, he said, "In my 40 years here, I've never said what the White House has told me." The House passed its bill in January, and the Senate moved forward Tuesday after a deal was struck for a few holdout senators to remove their opposition.

### 2NC – Thumpers – AT: Mexican Ambassador

#### Doesn’t thump—it’s bipart

Bernal 3/9- correspondent for The Hill (Rafael, “Menendez wants vote on ambassador to Mexico”, The Hill, 3/9/16, http://thehill.com/blogs/blog-briefing-room/news/272412-menendez-wants-vote-on-ambassador-to-mexico)//WK

Sen. Bob Menendez (D-N.J.) said Wednesday the Senate should hold a vote to confirm Roberta Jacobson, President Obama’s nominee to serve as U.S. ambassador to Mexico. Menendez said he would vote against Jacobson, but argued she should get a vote from the full Senate. “I don't have a hold on her,” he told The Hill. “My solution is we'll have a vote on her.” Obama nominated Jacobson in June to replace Ambassador Earl Anthony Wayne, who left his post on July 31, 2015. Sen. Marco Rubio (R-Fla.) has publicly opposed Jacobson’s nomination, citing her role in the administration's failure to complete Joaquín "El Chapo" Guzmán's extradition from Mexico, her representation of Venezuela's political situation before the Senate, and her role in Cuban rapprochement. Menendez has also opposed her nomination, but he denied multiple reports that he has blocked her nomination. “I intend to vote against her because of a series of things that happened not related to Cuba, not related to Mexico," Menendez said Wednesday. He connected his opposition to issues related to Venezuela and a “lack of information” on "a variety of other issues within her jurisdiction." Jacobson was supported by the Senate Foreign Relations Committee by a bipartisan 12-7 vote in November, with strong support from Sens. Jeff Flake (R-Ariz.) and Tom Udall (D-N.M.).

### 2NC – Thumpers – AT: Puerto Rico

#### Puerto Rico is already priced in

Jordan Fabian 1/26, "Trade notably absent from White House recap of Pelosi-Reid meeting", 1-26-2016, http://thehill.com/policy/finance/267065-trade-notably-absent-from-white-house-recap-of-pelosi-reid-meeting, DOA: 1-27-2016, y2k

President Obama sat down with Senate Minority Leader Harry Reid (D-Nev.) and House Minority Leader Nancy Pelosi (D-Calif.) on Tuesday to discuss his legislative agenda for the year ahead.

But one topic was left out of a description of the meeting provided by the White House: the Trans-Pacific Partnership (TPP), a trade deal many Democrats in Congress oppose.

The leaders discussed other areas of bipartisan agreement, including criminal justice reform, fighting the opioid epidemic and solving Puerto Rico’s debt crisis. And they talked about “adequately” funding the government in year-end budget talks.

“The president and leaders agreed that there is important business to get done this year,” White House spokeswoman Jen Friedman said in a statement, adding that Obama looks forward “to working with the Democratic leaders in the months ahead to deliver results to the American

people.”

The White House meeting came ahead of congressional Democrats’ annual retreat in Baltimore, where Obama and Vice President Biden, who also attended the discussion, are slated to address party lawmakers.

The Pacific Rim trade deal is one of the most significant remaining items on Obama’s to-do list for Congress in 2016, but it faces a difficult path to passage.

Obama believes the 12-nation pact will boost the U.S. economy and counter China’s burgeoning influence in Asia. If Congress approves the deal, it would add a major item to Obama’s list of accomplishments before he leaves office.

But many Democratic lawmakers oppose the deal, arguing it does not have strong enough labor and environmental protections and will ship American jobs overseas. The top two Democratic presidential candidates, Hillary Clinton and Bernie Sanders, also oppose the deal.

Reid, Pelosi and many Democratic members voted against giving Obama trade promotion authority last year, but the measure passed and paved the way for the agreement to be finalized.

The president was forced to rely on Republican votes for that bill, but so far, Obama has not sat down for a formal meeting with Speaker Paul Ryan (R-Wis.) or Senate Majority Leader Mitch McConnell (R-Ky.).

McConnell has also thrown a wrench into the process, warning the White House not to send the deal to Capitol Hill for a vote before this fall’s elections. Obama’s aides have said there is no reason to delay the vote.

Supporters of the deal are hoping for a vote before Congress adjourns for its summer recess in July.

Pelosi told reporters earlier this month she planned to carefully study the TPP despite bucking the president on the trade authority measure.

Also not mentioned in the recap of the White House meeting was Obama’s push to close the Guantanamo Bay military prison. Defense Secretary Ashton Carter said this weekend he has sent a new proposal to transfer detainees to U.S. soil to Obama, who he expects will submit it to Congress.

But Republicans, and some Democrats, vehemently oppose housing Guantanamo prisoners in the country.

Meanwhile, Obama is working to hold together the fragile bipartisan coalition behind an overhaul of the criminal justice system.

### 2NC – Thumpers – AT: TPP

#### SCOTUS fight comes first

**White 3/17**/2016. (Ben, Reporter for Politico. “TPP taking a backseat to SCOTUS?,” Politico. http://www.politico.com/tipsheets/morning-money/2016/03/morning-money-213256)//CB

TPP TAKING BACKSEAT TO SCOTUS? — An M.M. source says members of the business community have come away from meetings with senior administration officials including Treasury Secretary Jack Lew, NEC Chair Jeff Zients and USTR Michael Froman worried that the new fight over Merrick Garland’s Supreme Court nomination could sap White House staff time and political capital away from an effort to get the Trans Pacific Partnership through Congress.¶ The source said the White House window for getting TPP done is June and July, before the party conventions. And the fear is that with top staff deployed to the Garland effort, TPP could wind up flagging. “There is only so much staff time and so much political capital left for this administration,” the source said. “It’s not clear they can do both of these things in the little time they have left.”

#### Scalia’s death changed the game---it’s a battle royale for nomination

Ryan Dukeman 2/16, "Scalia’s effect on the TPP", No Publication, http://dailyprincetonian.com/opinion/2016/02/scalias-effect-on-the-tpp/, DOA: 2-21-2016, y2k

Of all that’s been written about the ramifications of the unexpected death of Supreme Court Justice Antonin Scalia – from its effect on upcoming cases before the court to Senate races in November and even to the presidential race, to which Ted Cruz ’92 is now referring to as a “referendum on the Court” – comparatively little has been said about its effect on other legislative issues that would have otherwise dominated this year. On the domestic side, the President’s final year was supposed to be spent on criminal justice reform, which just a few months ago seemed like a real bipartisan possibility, and lobbying for congressional approval of the Trans-Pacific Partnership, a massive free-trade deal that covers 40 percent of the world’s GDP that the administration signed last year. Instead, the year will now be consumed with what The New York Times is already calling a “battle royale” for the soul of the court for a generation. As Scalia was a reliably conservative vote, if President Obama is able to successfully fill his seat with a liberal, the Court’s balance would shift 5-4 in favor of Democratic appointees, reversing its decades-old conservative majority.

#### Obama stopped pushing TPP

Jordan Fabian 1/26, "Trade notably absent from White House recap of Pelosi-Reid meeting", 1-26-2016, http://thehill.com/policy/finance/267065-trade-notably-absent-from-white-house-recap-of-pelosi-reid-meeting, DOA: 1-27-2016, y2k

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### 2NC – Thumpers – AT: Proves No Link

#### Our story on the thumper is consistent – presidents make choices about which initiatives to push and spend capital on.

Beckmann and Kumar 11. [Matthew, Associate Professor of Political Science at UC Irvine, Vimal, econ prof at the Indian Institute of Tech, “Opportunism in Polarization”, Presidential Studies Quarterly; Sep 2011; 41, 3]

Returning to our model and its implications, we see a prerequisite to presidential influence is the president's willingness and ability to spend political capital lobbying lawmakers. When a president either chooses not to get involved (A = 0) or lacks political capital to spend (B = 0), the pivotal senator will propose and pass her preferred bill. In such circumstances, the chamber's preference distribution does not matter; the president will have no influence. In other circumstances - ones commonplace since Franklin D. Roosevelt entered the Oval Office - the president not only seeks to exert influence on Capitol Hill, but also wields some political capital to invest to that end. We now turn to these cases and in doing so uncover how presidents' influence turns on more than his supply of political capital and the location of the pivotal voter; it also depends on the level ideological polarization. Let us explain.

#### This agenda prioritization is key to passage.

Beckmann and Kumar 11. [Matthew, Associate Professor of Political Science at UC Irvine, Vimal, econ prof at the Indian Institute of Tech, “How presidents pus, when presidents win: A model of positive presidential power in US lawmaking” Journal of Theoretical Politics, Vol 23 Issue 1]

The first and perhaps most important prescription is that the White House does not treat all presidential positions equally: most receive nothing more than a mere comment, a precious few get the White House’s ‘full court press’, and such prioritizing matters. Specifically, our basic hypothesis holds that presidents’ positive influence depends heavily on lobbying to work. The corollary, therefore, is that the crucial test of presidents’ influence is not whether ‘skilled’ presidents fare better than their ‘unskilled’ counterparts, but rather whether Congress responds differently to bills depending on the presidents’ lobbying, all else being equal.

#### President has to push the plan – otherwise it never makes the agenda

Cohen and Collier 99– Jeffrey Cohen, professor of political science at Fordham University, and Ken Collier, assistant professor at the University of Kansas, 1999, Presidential Policymaking: An End of Century Assessment, ed. Shull, p. 45

Presidential influence over the congressional agenda aims not only to open the gates for some issues but to block other issues from progressing through the policymaking process. Presidents may try to block some issues by not addressing them, by being inattentive. Often presidential involvement is **required** for a policy to get onto the agenda. Lack of presidential attention may signal that the problem is not as important as others. Policy advocates seek to prove that their issue is worthy of national attention; getting the presidential “stamp of approval,” may be a **necessary step** in making an issue “national.”

## Disease Impacts

### 1NC Scenario

#### Garland preserves public health agency independence.

Kaplan, 3/16 (Sheila, Washington correspondent for STAT, covering the intersection of science, money, and politics, "Obama's supreme court nominee has a history of siding with health agencies," STAT, www.statnews.com/2016/03/16/obama-garland-supreme-court/

The Food and Drug Administration and other public health agencies will likely be pleased by President Barack Obama’s nomination Wednesday of Merrick Garland to the Supreme Court. That’s because Garland, currently chief judge on the US Court of Appeals in Washington, D.C., is known for backing federal agencies like FDA and the Environmental Protection Agency against legal challenges on health-related cases. And although he does not have a long list of legal opinions on health-related cases, Garland has sided with federal agencies on cases involving medical marijuana, access to experimental drug treatments, and limiting public exposure to mercury. In the case on medical marijuana, heard in 2012 and decided in 2013, Garland was reluctant to second-guess the Drug Enforcement Administration’s reading of the medical studies and its insistence that marijuana should be treated as a dangerous drug with no medical value. Supporters of medical marijuana wanted the agency to change its classification, arguing that DEA was biased against marijuana and was overlooking its benefits and hyping its harms. “Don’t we have to defer to their judgment?” Garland asked, according to the Los Angeles Times. “We’re not scientists. They are.” Garland has had a reputation for years as a judge who takes the federal agencies’ sides. “Judge Garland has strong views favoring deference to agency decision makers,” legal scholar Tom Goldstein wrote when Garland’s name was mentioned as a possible nominee back in 2010. “In a dozen close cases in which the court divided, he sided with the agency every time. “ But Washington lawyer Reuben Guttman, an expert on FDA law, suggested that Garland would still ask the agencies to justify their arguments. “While it is always difficult to predict with precision how a judge will opine when seated on the Supreme Court, my sense is that Judge Garland fully respects the role of expert agencies like the FDA, but at the same time will rigorously look behind their decisions to determine whether they are governed by the proper administrative process,” he said.

#### Broad public health agency power key to avoid pandemics.

Galva, 5 (Jorge E., JD and MHA (Master of Health Administration), "Public Health Strategy and the police powers of the state," Public Health Reports, 120 (suppl 1): 20-27, www.ncbi.nlm.nih.gov/pmc/articles/PMC2569983/

It is hard to envision the application of the MSEHPA in a manner congruent with stringent quarantine measures. The procedural guarantees in the MSEHPA may well be impossible to implement due to the risk of exposing judges, witnesses, and the public to possible contagion. In addition, the judiciary and public authorities are not prepared to implement quarantine orders due to lack of familiarity with public health doctrines or logistical shortcomings.74,75 The effects of one successful injunction resulting from these shortcomings—very likely under the MSEHPA—allowing, for example, a single SARS super-spreader to avoid quarantine, could be devastating.76 A perfect balance between private and public rights in the face of a highly infectious disease may not be attainable, or even desirable. Emergency activities will be effective if the states' exercise of public health police power is strengthened by good scientific practices and rigorous application of justified means of control. Expiration of any extraordinary powers once the emergency is controlled remains an obligatory feature unless there is reauthorization on the basis of solid scientific evidence. The ultimate goal of public health law should be the reinforcement of public health on the basis of historic principles of police power allowing broad but temporary administrative activities that are needed to face an impending emergency when the situation warrants.77 This necessitates a return to the traditional historic bases of public health police power. Recommended steps in this direction should include: (1) reinforcing the administrative capability for the issuance of robustly evidence-based public health orders properly issued under authority of law; (2) removing all judicial pre-intervention review measures of such orders while limiting review of public health orders to the post-execution phase; (3) subjecting all public health orders to automatic expiration terms and making renewal of the orders contingent on the same robust degree of evidence allowing the original order.

#### Extinction.

Casadevall 12. (Arturo, MD and Ph.D from New York University. “The Future of Biological Warfare” Microbial Biotechnology. March 21 2012 Wiley.)

In considering the importance of biological warfare as a subject for concern it is worthwhile to review the known existential threats. At this time this writer can identify at three major existential threats to humanity: (i) large-scale thermonuclear war followed by a nuclear winter, (ii) a planet killing asteroid impact and (iii) infectious disease. To this trio might be added climate change making the planet uninhabitable. Of the three existential threats the ﬁrst is deduced from the inferred cataclysmic effects of nuclear war. For the second there is geological evidence for the association of asteroid impacts with massive extinction (Alvarez, 1987). As to an existential threat from microbes recent decades have provided unequivocal evidence for the ability of certain pathogens to cause the extinction of entire species. Although infectious disease has traditionally not been associated with extinction this view has changed by the ﬁnding that a single chytrid fungus was responsible for the extinction of numerous amphibian species (Daszak et al., 1999; Mendelson et al., 2006). Previously, the view that infectious diseases were not a cause of extinction was predicated on the notion that many pathogens required their hosts and that some proportion of the host population was naturally resistant. However, that calculation does not apply to microbes that are acquired directly from the environment and have no need for a host, such as the majority of fungal pathogens. For those types of host–microbe interactions it is possible for the pathogen to kill off every last member of a species without harm to itself, since it would return to its natural habitat upon killing its last host. Hence, from the viewpoint of existential threats environmental microbes could potentially pose a much greater threat to humanity than the known pathogenic microbes, which number somewhere near 1500 species (Cleaveland et al., 2001; Taylor et al., 2001), especially if some of these species acquired the capacity for pathogenicity as a consequence of natural evolution or bioengineering.

### 2NC Internal Link

#### Role of the court for public health latitude key to stop disease.

Stier, 7 (Daniel D., a veteran attorney and administrator with decades of experience in law offices and programs at state and federal levels. From March, 2010 until May, 2013, he was the director of the Network for Public Health Law’s National Coordinating Center, "The Courts, public health, and legal preparedness," Am J Public Health, April, www.ncbi.nlm.nih.gov/pmc/articles/PMC1854991/

The judicial branch’s key roles, as guardian of civil liberties and protector of the rule of law, can be acutely relevant during public health emergencies when courts may need to issue orders authorizing actions to protect public health or restraining public health actions that are determined to unduly interfere with civil rights. Legal preparedness for public health emergencies, therefore, necessitates an understanding of the court system and how courts are involved in public health issues. In this article we briefly describe the court system and then focus on what public health practitioners need to know about the judicial system in a public health emergency, including the courts’ roles and the consequent need to keep courts open during emergencies. We are under a Constitution, but the Constitution is what the judges say it is, and the judiciary is the safeguard of our liberty and our property under the Constitution. —Charles Evans Hughes (American Jurist and Statesman, 1862–1948) The prophecies of what the courts will do in fact, and nothing more pretentious, are what I mean by the law. —Oliver Wendell Holmes, Jr (The Path of the Law, Harvard Law Review, 1897). THE JUDICIAL BRANCH OF THE US system of government stands as the guardian of civil liberties and protector of the rule of law. The critical role that our courts play is particularly important during emergencies. At such times, courts may, for example, issue orders authorizing certain actions to protect public health. Courts may also intervene to restrain public health actions that are determined to unduly interfere with civil rights. Legal preparedness for public health emergencies, therefore, necessitates an understanding of the role of the courts in the US system of justice and the involvement of the courts in public health issues. To effectively perform its role, the judiciary may periodically require enhanced understanding of a public health issue. Public health officials must also be thoroughly familiar with judicial rules and procedures and be ready to bring the presiding jurist up to speed on the law and facts. Put simply, public health officials, as well as their attorneys, must know their way around the courthouse. Recognizing that mutual understanding is particularly important with regard to public health emergencies, we focus on the courts’ critical roles in and preparedness needs for such emergencies. As an essential backdrop, we provide an introduction to the structure and function of federal and state courts and describe how federalism requires state and federal courts to share power. We then address what public health practitioners need to know about the judicial system in a public health emergency, including the role of the courts and the consequent need to keep courts open during emergencies. Finally, we describe tools that are being developed to assist courts in performing their important tasks during a public health emergency. Although this article is devoted to the courts’ roles in and preparedness needs for public health emergencies, it is important to understand that outside of the public health emergency context disputes involving every type of public health issue may be taken up in court. Those issues may arise from public health areas as diverse as environmental protection, injury prevention, eradication of nuisances (i.e., hazardous waste, unsanitary conditions, and so on), reproductive health, and infectious disease control.

### 2NC Yes Extinction

#### Mutating Diseases risks extinction

Greger 8 – M.D., is Director of Public Health and Animal Agriculture at The Humane Society of the United States (Michael Greger, , Bird Flu: A Virus of Our Own Hatching, http://birdflubook.com/a.php?id=111)

Senate Majority Leader Frist describes the recent slew of emerging diseases in almost biblical terms: “All of these [new diseases] were advance patrols of a great army that is preparing way out of sight.”3146 Scientists like Joshua Lederberg don’t think this is mere rhetoric. He should know. Lederberg won the Nobel Prize in medicine at age 33 for his discoveries in bacterial evolution. Lederberg went on to become president of Rockefeller University. “Some people think I am being hysterical,” he said, referring to pandemic influenza, “but there are catastrophes ahead. We live in evolutionary competition with microbes—bacteria and viruses. There is no guarantee that we will be the survivors.”3147 There is a concept in host- parasite evolutionary dynamics called the Red Queen hypothesis, which attempts to describe the unremitting struggle between immune systems and the pathogens against which they fight, each constantly evolving to try to outsmart the other.3148 The name is taken from Lewis Carroll’s Through the Looking Glass in which the Red Queen instructs Alice, “Now, here, you see, it takes all the running you can do to keep in the same place.”3149 Because the pathogens keep evolving, our immune systems have to keep adapting as well just to keep up. According to the theory, animals who “stop running” go extinct. So far our immune systems have largely retained the upper hand, but the fear is that given the current rate of disease emergence, the human race is losing the race.3150 In a Scientific American article titled, “Will We Survive?,” one of the world’s leading immunologists writes: Has the immune system, then, reached its apogee after the few hundred million years it had taken to develop? Can it respond in time to the new evolutionary challenges? These perfectly proper questions lack sure answers because we are in an utterly unprecedented situation [given the number of newly emerging infections].3151 The research team who wrote Beasts of the Earth conclude, “Considering that bacteria, viruses, and protozoa had a more than two-billion-year head start in this war, a victory by recently arrived Homo sapiens would be remarkable.”3152 Lederberg ardently believes that emerging viruses may imperil human society itself. Says NIH medical epidemiologist David Morens, When you look at the relationship between bugs and humans, the more important thing to look at is the bug. When an enterovirus like polio goes through the human gastrointestinal tract in three days, its genome mutates about two percent. That level of mutation—two percent of the genome—has taken the human species eight million years to accomplish. So who’s going to adapt to whom? Pitted against that kind of competition, Lederberg concludes that the human evolutionary capacity to keep up “may be dismissed as almost totally inconsequential.”3153 To help prevent the evolution of viruses as threatening as H5N1, the least we can do is take away a few billion feathered test tubes in which viruses can experiment, a few billion fewer spins at pandemic roulette. The human species has existed in something like our present form for approximately 200,000 years. “Such a long run should itself give us confidence that our species will continue to survive, at least insofar as the microbial world is concerned. Yet such optimism,” wrote the Ehrlich prize-winning former chair of zoology at the University College of London, “might easily transmute into a tune whistled whilst passing a graveyard.”3154

## Econ Scenario

### 1NC Econ

#### Leaving the Court with a vacancy decks US political legitimacy and crushes the global economy

Chon 2/14 (Gina Chon – Washington Columnist, former columnist of FT and the Wall Street Journal, “Antonin Scalia’s death challenges U.S. leadership,” 14 February 2016, http://blogs.reuters.com/breakingviews/2016/02/14/antonin-scalias-death-challenges-u-s-leadership/)

The death of Antonin Scalia disrupts the Supreme Court’s balance and electrifies an already charged presidential race. The longest-serving member of the panel also leaves behind a vacancy just as the highest U.S. court is considering important cases on immigration, abortion and unions. Leading Republicans are already threatening to block any Barack Obama nominee to replace Scalia, hinting at a destabilizing stalemate. Slumping oil prices, slower growth in China and negative interest-rate policies out of the European and Japanese central banks have made for a volatile year. The S&P 500 Index has tumbled by 9 percent to start 2016, while shares in European banks have fallen by more than 25 percent. In its fragile state, the world is seeking leadership from the United States. Restoring the Supreme Court to nine members in the few months it generally takes to do would be a strong showing that American politicians can govern on some matters despite the dysfunction witnessed over the last few years. With Scalia, a Ronald Reagan appointee, there was a five-to-four conservative majority. A White House nominee to replace Scalia – which Obama said he would do just hours after Scalia’s death – requires approval from the Republican-controlled Senate. Conservative presidential candidate Ted Cruz, a former Supreme Court clerk, said Scalia’s replacement should be left to Obama’s successor and Senate Majority Leader Mitch McConnell concurred. That would leave the seat empty for at least a year. At eight members, the court is at risk of being deadlocked. That could upend issues such as the president’s executive action allowing 5 million illegal immigrants to stay in the country. If the Supreme Court can’t reach a majority opinion, the lower court’s ruling halting the order would be affirmed. In January, the court also seemed like it might decide that workers don’t have to join public-sector unions, and therefore not pay dues, which would be a major blow to the labor movement. That decision also now hangs in the balance, as does the court’s first major abortion case in almost a decade. With so much at stake, a compromise on a centrist candidate would be an ideal outcome, both for the country and as a show of leadership around the world. The U.S. political realities, however, threaten to rattle already shaky global investors and economies.

### Econ Scenario

#### Scalia’s death gave power to class action lawsuits – a 4-4 split damages this further

Lawrence Hurley, Reuters, 2-27-2016, “Dow settlement signals impact of Scalia death on class actions”, Reuters, http://www.reuters.com/article/us-usa-court-classactions-idUSKCN0VZ2TF

Dow Chemical Co's agreement to pay $835 million to settle a price-fixing dispute provides evidence that Justice Antonin Scalia's death is a blow to businesses that have had success recently in challenging class action cases at the U.S. Supreme Court. Dow (DOW.N), in the process of merging with Dupont (DD.N), on Friday settled the decade-long dispute rather than risk its fate being decided by a shorthanded, eight-justice court missing, in Scalia, a reliable vote in support of companies in class action cases. The Dow dispute, in which it was accused of conspiring to artificially inflate polyurethane prices, had been on hold at the high court pending the outcome of another case. Following Scalia's Feb. 13 death, the court's conservative wing lacks the five votes needed "to make dramatic new rules that curtail class actions," said Paul Bland, executive director of consumer advocacy group Public Justice. Dow said in a statement that Scalia's death and the raging political fight over naming his successor meant an "increased likelihood for unfavorable outcomes for business involved in class action suits." Two important class action cases were argued before the Supreme Court during its current term with Scalia on the bench. Based on November's oral argument, it appeared Tyson Foods Inc (TSN.N) would lose its challenge to an almost $5.8 million class action judgment, with or without Scalia's vote. The court had put off its decision on whether to hear Dow's case pending its decision in the Tyson Foods case. A Wal-Mart Stores Inc (WMT.N) challenge to another class action lawsuit also was on hold before the high court, awaiting the Tyson ruling. Wal-Mart is seeking to throw out a $187 million class action judgment over its treatment of workers in Pennsylvania. Michael Donovan, a lawyer for the plaintiffs, said there have not been any settlement talks prompted by Scalia's death. The other class action case heard by the Supreme Court this term involved online search company Spokeo Inc. The court appeared closely divided following November's oral argument, meaning it potentially could be split 4-4. That would hand a victory to the plaintiffs, although such a ruling would not set a national precedent. CURBING CLASS ACTIONS With Scalia joining the four other conservative justices in the majority, the court in recent years had issued a series of rulings curbing class-action litigation against businesses. These included significant victories for Wal-Mart in 2011 and Comcast Corp (CMCSA.O) in 2013. In those two cases, Scalia wrote the majority opinion for the court. The Comcast ruling was 5-4. The Wal-Mart decision was 5-4 on one aspect and unanimous on another. Scalia's absence may influence the court's decisions on which new cases to hear. Four of the eight remaining justices must agree in order for the court to take up a case. As early as Monday, the court could say whether or not it will hear a case involving Direct Digital LLC that class action lawyers are watching closely. The dispute focuses on what evidence is needed to show that members of a class have suffered an alleged injury. Other class action cases that the Supreme Court must decide whether to hear include another one filed by Wal-Mart that is a successor to the gender discrimination suit that led to the 2011 ruling in the retailer's favor. Before Scalia's death, the justices also had agreed to hear an appeal filed by Microsoft Corp(MSFT.O), which is attempting to throw out a class action lawsuit filed by Xbox 360 owners who contend that the videogame console has a design defect that causes game discs to be gouged. That case has not yet been scheduled for oral argument. The court ruled on Jan. 20 against advertising firm Campbell-Ewald in another class action case, allowing a lawsuit to proceed. With President Barack Obama poised to nominate a successor but the Republican-controlled Senate insisting that the next president, due to take office in January 2017, fill the vacancy, the high court could remain shorthanded for more than a year. Any nominee picked by Obama or another Democratic president could be expected to be more sympathetic to plaintiffs bringing class action cases against businesses.

#### Garland prefers efficient restraint-free markets – he rules against those lawsuits

Merrick B. Garland, Chief Judge of the United States Court of Appeals for the District of Columbia Circuit, January 1987, “Antitrust and State Action: Economic Efficiency and the Political Process “, 518-519, Yale Law Journal, Volume 96, Number 3, Jstor, <http://www.jstor.org/stable/796502>

When litigants first began a spate of antitrust challenges to state regula-tory programs, they presented the Court with a difficult dilemma: how to respect the political process in the states without frustrating Congress’ purpose in enacting the Sherman Act. The resolution the Court reached, sometimes precarious and often difficult to apply in individual cases, was to focus on preventing the delegation to private parties of the power to restrain competition. As long as a state retained effective control over the regulation of its economy, the federal judiciary would honor that state’s political decision to restrain market forces. When the state relinquished control to private parties, however, the national political decision to bar such private regulation would prevail. At bottom, the flaw in the proposals to revise the state action doctrine is that the take two useful analytic tools – microeconomic theory and cap-ture theory – and apply them as normative concepts in an area in which they are inapposite. There is much to be said – and debated193 – about the merits of using economic efficiency criteria to derive antitrust rules for private commercial conduct, or to assist policymakers in weighing the costs and benefits of public programs. But it is a considerable leap to move from such analytic application to the notion that federal courts should use the state action doctrine to preempt state regulations that impose ineffi-cient restraints on market competition. Similarly, there is much to be said – and debated194 – about the uses of capture theory in understanding legislation and regulation, and even in crafting administrative law doctrine. The theory may enhance the demo-cratic process by informing legislators, regulators, and voters of the true genesis of programs put forward in the guise of the public interest. In administrative law, it may lead to closer judicial scrutiny of captured agencies to ensure that they truly heed the legislative will.195 But using capture theory as a criterion for applying the state action doctrine is another matter altogether. In that context, it is used neither as a tool for understanding politics, nor as an instrument for ensuring agency fidelity to the results of the political process. To the contrary, when used as the touchstone for preempting state law, capture theory becomes a weapon for overturning those results. And that is a role the courts should not permit the antitrust laws to play.

#### Those lawsuits wreck the US economy – stocks, innovation, efficiency, delisting

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It is worth noting that the $109 billion settlement number is inclusive of plaintiffs’ attorneys’ fees and does not represent the amounts actually distributed to plaintiffs. The SCAS database shows that for the settled cases, plaintiffs’ attorney’s fees were 18% of total settlement.50 Of the $109 billion, the amount distributed to shareholders was less than $90 billion ($109 billion minus 18% is $89.4 billion). Thus, announcement of these lawsuits destroys shareholders’ wealth that is more than 7.5 times their recovery after attorneys’ fees are subtracted ($701 billion/$89.4 billion equals 7.8). This $701 billion estimate of net shareholder wealth loss is likely a substantial understatement because it does not account for any negative share price effect prior to the actual lawsuit announcement that may have been anticipated. Gande and Lewis (2009) note that a focus on price reactions on lawsuit filing dates understates the magnitude of shareholder losses because securities class actions are anticipated by investors following large price drops.51 Griffin, Grundfest, and Perino (2000) similarly state that while “several studies document that the stock market reacts swiftly and negatively to a corrective disclosure that leads to securities class action litigation”, this result is “generally unsurprising and most likely overstate[s] the stock price response to a corrective disclosure because [it] reflect[s] the impact of a self-selected set of negative news events based on knowledge that the firm would later be sued in a securities class action.”52 Griffin, Grundfest, and Perino (2000) further note that “given the legal rules of damage recovery, it would be irrational for a plaintiff to file a class action complaint against these firms absent a significant price decline that supports a claim for damages.”53 Furthermore, because we did not select any announcement until at least one trading day after the final class period has ended results in our ignoring earlier announcement of such lawsuits, i.e., we often pick stale news. Often the final class period is longer than initial class period alleged in earlier lawsuits. In many cases, after shareholder class action lawsuits have been filed, a subsequent negative announcement accompanied by a large drop in stock price leads to amended lawsuits to cover a longer class period to include the period of a later price drop. In our sample of announcements in Table 6, in over 30% of the cases, there had been at least one earlier announcement of a shareholder class action with same or similar allegations. This is another reason why our measurement of shareholder wealth loss is understated and the full measure of the shareholder wealth destruction by such lawsuits is likely to be substantially larger. Moreover, our $701 billion net shareholder value destruction figure also does not account for a host of other likely substantial adverse effects of securities litigation on shareholders and the wider U.S. economy. First, given the frequency with which U.S. firms are sued, all U.S. firms must buy costly Directors and Officers (D&O) insurance coverage.54 Additionally, the premiums for such insurance may often increase after a lawsuit is filed. Yet, such securities class actions have little deterrence effect.55 Corporate officers such as the chief executive officer are almost always named as defendants,56 but rarely pay for the settlement.57 In fact, the presence of insurance actually increases the odds of getting sued as the settlement depends on such insurance coverage.58 Second, the risk of litigation hampers innovation. Research and development that can result in tremendous benefits to society at large (such as the development of a life-saving drug) costs billions and fails most of the time.59 When such bad news is released, the company’s stock price falls, often leading to a class action alleging the price drop was “caused” by the curative disclosure of some earlier misstatement or omission — a claim whose merits are unlikely to ever be evaluated at trial.60 The costs of defending and settling meritless securities class actions leave less available for investment in research and development and tends to repress innovation directly. This innovation reduction effect is also consistent with corporate finance theory. The required rate of return on corporate investments (hurdle rate) depends on the stock price, according to Fischer and Merton (1984).61 The hurdle rate increases as the company’s stock price drops (for instance, in anticipation of a lawsuit, or given the expected ongoing legal defense costs that a firm facing such litigation is expected to bear) as shareholders demand a higher rate of return on their investment. An increase in hurdle rate inhibits corporate investments and in turn reduces job creation.62 Third, such litigation inhibits voluntary disclosures by firms rather than enhancing openness and transparency.63 Rogers and Van Buskirk (2007) empirically document that after being named in disclosure-related litigation, firms reduce the amount of information they voluntarily provide to investors64 because managers “emerge from the litigation process…believing that plaintiff attorneys will use such disclosures to accuse managers of misconduct, even when the disclosures were made in good faith.”65 Thus the effect of such lawsuits may make U.S. capital markets less efficient rather than more efficient. Finally, it is widely perceived that the legal system in the U.S. imposes greater costs on businesses than the legal systems of other major capital markets. Senior executives from nine of ten foreign companies that delisted from the United States between 2003 and 2007 cited litigation risk as a factor.66 Indeed, foreign firms that do choose to list on U.S. public exchanges have faced a growing number of securities class actions in recent years.67,68 Overall we conclude that the net adverse economic impact of securities class actions is much larger than the settlements they produce. The cost to the company from such lawsuits, including the cost of a potential future settlement reduces the price of the company stock and such costs are borne largely by shareholders at the end of the class period when these lawsuits are filed. Thus, these lawsuits inflict incremental economic harm to the same shareholders on whose behalf such lawsuits are filed.

### 2NC Lawsuits Wreck Economy

#### These lawsuits wreck the economy and the Supreme Court plays a big role in setting these standards

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Since the U.S. Supreme Court’s Basic decision, plaintiffs have been allowed to invoke the “fraud-on-the-market” presumption to “facilitate” private securities class actions. As a result, thousands of cases have been filed alleging billions of dollars in shareholder damages purportedly caused by corporate securities fraud. The merits of such claims are almost never tested at trial as most cases are either dismissed or receive in terrorem settlements. In justifying private securities class action litigation, securities class action plaintiffs’ attorneys, whose fees are contingent on the size of the settlement, claim that settlement payments represent a significant benefit to their clients. To the contrary, our empirical analysis of over 1,400 settlements from 1996 to the present demonstrates that the shareholders who are alleged victims on whose behalf these lawsuits are ostensibly filed have actually suffered an incremental wealth loss due to the filing of such suits that is over $262 billion. This result is significant because by focusing on effects of announcements soon after the end of the class period, we measured the effect on wealth of the same group of shareholders on whose behalf these lawsuits are filed and who expect to participate in future recoveries, if any. Since we only measured wealth loss upon announcements occurring after the class period has ended and excluded all in-class period price reactions, this wealth loss cannot be said to be related to purported revelation of the alleged fraud. In fact, because these lawsuits are expected to be filed following negative news accompanied by a significant drop in stock price, we measured only the component of wealth destruction that was not anticipated at the time of the purported revelation of the fraud that led to these lawsuits. Notably, our analysis only covered settled cases. A reasonable extrapolation of the wealth destruction we documented to account for filed cases that have resulted in no settlement as of the date of our study increased the incremental wealth loss from $262 to $701 billion. In contrast, the expected settlement amount received by plaintiffs in post-PSLRA cases is less than $90 billion with $19 billion going to plaintiffs’ attorneys as contingency fees. Moreover, the $701 billion estimate is a lower bound conservative estimate because it does not include the price effect of the anticipation of the lawsuit prior to the filing date, which the academic literature has noted is significant. We also empirically demonstrated through the analysis of actual claims data in a typical large securities class action settlement that the distribution of the final settlement may have little to do with economic theories on which plaintiffs base their reliance and damage claims. Our analysis of class member trading patterns showed that the trading patterns of class members who were allocated the largest share of the settlement amount indicate that they attempted to profit from inefficiencies in market prices even though the same plaintiffs claimed reliance on efficient markets as the basis for class certification. We also showed that there is a tenuous relationship between those shareholders purportedly harmed by the alleged fraud and those who eventually collect the settlement monies (after a significant portion is kept by the class action attorneys). In particular, we document that a major share of the settlement distribution likely goes to those that were net beneficiaries of the alleged fraud. Our overall conclusion is that private securities class actions significantly harm investors and the economy, and they do not actually compensate victims of alleged wrong-doing. Instead, they further harm the alleged victims as well as other innocent shareholders. Settlements in such cases are relatively minor compared to the overall shareholder wealth destroyed by such lawsuits and result in arbitrary wealth redistribution.

### 2NC Garland=Restraint

#### Garland prefers deference and less intrusion

Merrick B. Garland, Chief Judge of the United States Court of Appeals for the District of Columbia Circuit, January 1987, “Antitrust and State Action: Economic Efficiency and the Political Process “, 490-493, Yale Law Journal, Volume 96, Number 3, Jstor, http://www.jstor.org/stable/796502

As an empirical description of the Supreme Court’s state action cases, the capture theory could not be more wrong. To begin with, there is little if anything in the language of the opinions that suggests that the Court was reacting to a capture conception of regulation.28 Indeed, in those few cases in which the Court did note that the challenged legislation had been lobbied for by private interests, it upheld rather than rejected the state action defense. In New Motor Vehicle Board v. Orrin W. Fox Co.,29 for example, the Court upheld perhaps the most “captured” scheme ever to come before it: a California regulation permitting established automobile dealers to delay substantially the establishment of competing franchises in their geographic markets. Despite Justice Stevens’ dissenting view that the regulation re-presented nothing more than the success of the car dealers in lobbying the state legislature for a special anticompetitive benefit,30 the Court held that the state action exemption put the regulation beyond the reach of the anti-trust laws.31 Just one Term before, and over a similar dissent, the Court had upheld a Maryland statute barring oil company ownership of service stations – despite ample evidence that the statute was the successful prod-uct of a lobbying campaign by retail gasoline dealers. 32 Lacking internal inicia that the Justices have been motivated by the con-cern over anticompetitive capture, the revisionists must fall back on what they perceive as parallels in timing between increasing intellectual skeptic-cism toward regulation and the Court’s increasingly intrusive state action decisions.33 Such an approach might well be subject to attack post hoc reasoning – except that the asserted trend simply is not there. It is true that the Court rejected state action defenses in a number of post-Parker cases.34 It is also true that during the mid-1970’s the Court toyed with a number of state action tests, such as the requirement that the restraint be compelled an not simply approved by the state, that would have significantly narrowed the doctrine and permitted substantial judicial intrusion into state regulatory policies.35 But despite the blossoming in the 1980’s of a bipartisan, national consensus favoring economic deregula-tion,36 the recent trend in the state action cases has been one of greater judicial deference toward state regulatory policies. Since mid-1982, while deregulation has triumphed in Congress,37 the Court has upheld against antitrust attack all five state or local regulatory schemes that have come before it.38 Indeed the Terms following Judge Easterbrook’s pronouncement that the Justices had finally gotten the hang of economic analysis,39 the Court issued its three most deferential opinions and rejected the earlier, more intrusive state action tests.

## Environment Scenarios

### 2NC CPP Solves Warming

#### It’s key to transition away from fossil fuels

David Doniger 15, Director, Climate & Clean Air Program @ National Resources Defense Council, “Understanding the EPA's Clean Power Plan,” 8-11-15, <http://switchboard.nrdc.org/blogs/ddoniger/understanding_the_epas_clean_p.html>, DOA: 12-4-15, y2k

The Environmental Protection Agency (EPA) issued the final Clean Power Plan under the Clean Air Act, the nation's fundamental air pollution law. The Plan sets flexible and achievable standards that give each state the opportunity to design its own most cost-effective pathway toward a cleaner electricity system. This historic step to rein in power plant pollution will speed America's transition away from fossil fuels, protect our health and help to safeguard future generations from the worst effects of climate change, and position the United States for global leadership on climate change. The Clean Power Plan will sharply reduce carbon pollution and other dangerous air pollutants by shifting our electric power system toward cleaner energy sources at a steady but achievable pace. Enforceable carbon pollution limits will kick in starting in 2022 and ramp up into full effect by 2030. Power companies will start acting sooner than 2022 in order to get ready and in response to additional clean energy incentives in the Plan. The EPA projects that by 2030, the Clean Power Plan will cut the electric sector's carbon pollution by 32 percent nationally, relative to 2005 levels. In 2030 alone, the EPA projects that there will be 870 million fewer tons of carbon pollution. This is like canceling out the annual carbon emissions from 70 percent of the nation's cars, or from the annual electricity use of all U.S. homes.

#### EPA regulations is key to trap methane emissions---impact is catastrophic global warming

Myriam Alexander-Kearns 15 is the Research Associate for the Energy Policy team at the Center for American Progress, "The EPA’s Newest Methane Emissions Rule Is a Crucial Step for Climate Action," 5-9-2015, name, https://www.americanprogress.org/issues/green/news/2015/08/25/119922/the-epas-newest-methane-emissions-rule-is-a-crucial-step-for-climate-action/, DOA: 12-4-2015, y2k

On August 18, 2015, the Environmental Protection Agency, or EPA, proposed “new source performance standards” to directly regulate methane emissions from the oil and gas sector. Methane is a greenhouse gas that is even more potent than carbon dioxide. Over the first 20 years after being released into the atmosphere, methane is more than 80 times as effective at trapping heat in the atmosphere as carbon dioxide. Over 100 years, methane remains 28 times more powerful. This proposed rule is one part of the Obama administration’s larger effort to reach a goal set in January 2015: a 40 percent to 45 percent reduction in methane emissions from the oil and gas sector from 2012 levels by 2025. The EPA estimates that the proposed standards on new and modified sources would stop up to 400,000 short tons of methane from being leaked by 2025, the equivalent of up to 9 million metric tons of carbon dioxide. After the EPA released the rule, oil and gas industry groups quickly criticized it as being unnecessary and costly. The American Petroleum Institute said it is “duplicative, costly, and undermine[s] America’s competitiveness.” America’s Natural Gas Alliance called the proposal “unnecessary and counterproductive,” claiming that existing regulations and industry innovation would be enough to drive emissions reductions. These statements, while a predictable spin from industry trade associations, do not reflect the facts. Why implementing the rule makes sense First, this rule is one more essential step on the country’s long march to achieving the greenhouse gas emissions reductions needed to avert the worst impacts of climate change. Methane is second only to carbon dioxide as the most prevalent greenhouse gas in the United States. As a result, any successful climate change mitigation strategy will need to tackle this pollution source. Nearly 30 percent of methane emissions from human activities come from leaks in the oil and gas system. Moreover, methane emissions from the oil and gas sector are projected to grow approximately 25 percent in the next decade if left unaddressed. Second, the EPA’s rule is necessary to reduce methane pollution because voluntary industry measures have not been effective on their own. Out of the thousands of oil and natural gas companies currently in operation, less than 1 percent participate as partners in the agency’s long-standing Natural Gas STAR Program. This raises questions about whether the EPA’s new voluntary methane reduction initiative, the Natural Gas STAR Methane Challenge Program, will attract robust industry participation. Third, although the oil and gas industry would need to invest in equipment to plug methane leaks in order to comply with the rule, such equipment is both available and affordable. Both the Environmental Defense Fund and the Clean Air Task Force have referred to methane emissions from the oil and gas sector as “low-hanging fruit,” since industry can cut emissions cost effectively using existing technology that is already in use. In fact, some of this technology pays for itself. The EPA estimates that industry will be able to offset $30 million of the annualized engineering costs of implementing the rule if it sells 8 million thousand cubic feet of recovered methane in 2020. It is important to look at the estimated costs of the EPA rule in the context of the massive financial resources at the disposal of the oil and gas industry. The EPA estimates that the new source standards outlined in the proposed rule would cost the oil and gas sector $150 million to $170 million in 2020. In comparison, Continental Resources—one of the largest oil producers in the Bakken Shale formation, which stretches across Montana and North Dakota—reported $4.8 billion in revenue for 2014 and $977 million in profits. EOG Resources—another major oil producer in both the Eagle Ford Shale formation in Texas and the Bakken Shale—reported net operating revenue of $18 billion in 2014 and $2.9 billion in net income. In a similar vein, ExxonMobil and Chesapeake Energy, two of the largest natural gas producers in the United States, reported $32.5 billion and $21 billion in 2014 revenue, respectively. The cost of implementing the EPA’s proposed methane pollution standards pales in comparison to the oil and gas industry’s annual revenue, even in times of low oil prices. Finally, the proposed rule would improve human health. Methane pollution often goes hand in hand with other harmful pollutants, including smog-forming volatile organic compounds, or VOCs, and cancer-causing air toxins. In 2012, the EPA issued a rule to control VOC emissions from natural gas wells. The EPA’s proposed methane standards would have the co-benefit of reducing VOC pollution from additional sources, making the air easier to breathe for everyone, especially those suffering from asthma or other respiratory conditions. Further options to reduce methane pollution The new EPA proposal is just one leg of the Obama administration’s plan to cut methane pollution. The U.S. Bureau of Land Management is also drafting a rule to reduce venting and flaring of methane on public lands. And the EPA recently released a draft plan to regulate methane emissions from landfills. Most importantly, the EPA must look ahead to developing pollution reduction standards for existing sources of methane pollution in the oil and gas sector. The proposed performance standards apply only to new and modified sources of methane pollution in the oil and gas sector. Under the Clean Air Act, the EPA is now required to issue regulations for states to submit plans for reducing methane from existing sources. This will be critical: By 2018, nearly 90 percent of the oil and gas sector’s methane emissions will come from sources that were already in operation by 2011. More than a year ago, the state of Colorado issued rules to directly regulate methane from the oil and gas sector after negotiations with large operators in the industry and the environmental community. In response to the EPA proposal, Colorado Gov. John Hickenlooper (D) said that Colorado’s experience shows that “protecting public health and the environment, and promoting our energy industry are not mutually exclusive endeavors.” Following this practical approach, the EPA’s new source proposal simply asks oil and gas companies to adopt industry best practices and use readily available technology to reduce wasteful methane emissions. This is an achievable goal for industry—and one that is critical if the United States is to respond successfully to the threat of climate change.

### 2NC CPP Internal Link

Rebecca Leber 16, "Antonin Scalia’s Successor Could Determine the Fate of the Planet", 2-17-2016, New Republic, https://newrepublic.com/article/129995/antonin-scalias-successor-determine-fate-planet, DOA: 2-19-2016, y2k

It may seem like an academic exercise to preemptively criticize Srinivasan, since the chances of him being confirmed, at this point, appear close to zero. But Obama’s short list deserves scrutiny, since one person on that list may eventually be confirmed, if not under Obama, then under a Democratic successor. Climate activists, in particular, will be watching closely. For better or worse, the next Supreme Court has the power to alter the fate of the world.

As long as Congress remains divided, it will be the Supreme Court that defines the limits of what the Environmental Protection Agency can do to combat climate change for years to come. To understand how important the Supreme Court is to shaping the U.S.’s climate change policy, it helps to look back. The EPA’s powers to fight climate change have been mostly defined, even bolstered, by a number of key cases.

The Clean Air Act, passed by Congress in 1970 and strengthened in 1990 when the climate denial movement was nascent, forms the basis of President Barack Obama’s response to climate change. But the act did not include greenhouse gases on the list of pollutants the EPA was compelled to regulate. Over the years, the court has empowered the agency to regulate such pollutants, through the way it has interpreted the Clean Air Act and the EPA’s authorities (Scalia, it’s worth noting, was often antagonistic toward the EPA).

The landmark 1984 case Chevron v. Natural Resources Defense Council gave federal agencies a wide latitude to reasonably interpret statutes that were left vague by Congress. That precedent has long worked in the EPA’s favor—and its track record of winning a majority of court challenges since 2010 proves it. When President George W. Bush was still in office, the court decided for the first time in Massachusetts v. EPA that greenhouse gases qualify as an “air pollutant” under the act, if the EPA found it was a danger to public health. That decision was reinforced in 2011, when the court in American Electric Power v. Connecticut upheld a similar power for the EPA to regulate carbon pollution from new power plants. Obama would not have had the legal power to issue sweeping carbon pollution regulations for cars and power plants if the Supreme Court had decided differently.

The Court’s steps in the next few years could arguably be even more critical, and we got a frightening reminder last week, just days before Scalia’s death, that decisions could also swing the other way. The Court on a 5-4 vote issued an order last Tuesday to halt the EPA’s plan to curb carbon pollution from power plants, in what was the earliest stay of a federal regulation in the history of the Court. It was a worrying sign that a majority of the Court was preparing to eventually strike it down. If the EPA’s plan is thrown out, then a hard-won international climate change agreement reached in Paris last December could quickly go with it. After all, if the Supreme Court undercuts the centerpiece of the U.S.’s promise to tackle climate change, then U.S. allies have little incentive to follow through with their own pledges.

Scalia’s death, of course, robs the current Court of a conservative vote, which gives the EPA the advantage in this particular dispute. But that also means his replacement could be the deciding vote to protect the limited federal progress we’ve seen on climate change.

The next justice will be critical in determining the fate of Obama’s climate plan. Beyond that, the next justice will help the Court decide how far the next president can go it alone on climate change.

Experts think the Clean Air Act has more room in it to tackle pollution beyond power plants, indeed across the entire economy, but whether the Supreme Court will agree is another question. According to a report by legal experts at Columbia, New York University, and University of California, Los Angeles, there is an unused “International Air Pollution” provision in Section 115 of the Clean Air Act. This could mean a revolutionary approach to regulating pollution:

The language of Section 115 does not limit the agency to regulating a particular source-type, or a given industrial or economic sector. Rather, it grants EPA and the states broad latitude to address international air pollution comprehensively through the Clean Air Act’s State Implementation Plan process, increasing administrative efficiency and reducing burdens on regulated companies. EPA and the states could use the provision to establish an economy-wide, market-based approach for reducing [greenhouse gas] emissions.

The Paris deal may have opened the door to this interpretation, these experts argue, because Section 115 states the EPA or the secretary of state can act on air pollution that “may reasonably be anticipated to endanger public health or welfare in a foreign country.”

While the occupant of the Oval Office is of immense importance to climate change, the effectiveness of the president partly resides in the person he or she will appoint to the Supreme Court. Scalia’s replacement will help determine the Clean Power Plan’s legacy, and could dramatically redefine how the U.S. responds to climate change. A little extra scrutiny of Obama’s favored candidates wouldn’t hurt.

Robinson Meyer 16, an associate editor at The Atlantic, "Will a Reconfigured Supreme Court Help Obama's Clean-Power Plan Survive?", 2-14-16, Atlantic, http://www.theatlantic.com/politics/archive/2016/02/antonin-scalia-clean-power-plan-obama-climate-change/462807/, DOA: 2-19-2016, y2k

The death of U.S. Supreme Court Justice Antonin Scalia on Saturday sets up a battle between the White House and the Senate over who will nominate a new associate justice—a dispute over governing norms and constitutional imperatives, played out in the most powerful republic in the world.

The outcome of that fight could also exert unusual influence over the health of the planet and the survival of its natural systems. For although Scalia’s death has already changed the outlook for a number of cases now in front of the Supreme Court, it will also alter the shape of one that will soon arrive: the legal battle over the Clean Power Plan.

The Clean Power Plan is the new set of Environmental Protection Agency regulations that anchors the Obama administration’s climate-change policy. It seeks to guide local utilities away from coal-fired electricity generation, and toward renewable energy and natural gas, a change that the Department of Energy says will forestall hundreds of millions of tons of greenhouse-gas emissions. The plan’s survival—and its entry into law—could decide the fate of the Paris Agreement, the first international treaty to mitigate climate change. For a case that will ultimately turn on administrative law, it’s hard to imagine the stakes being much higher.

It had already been a busy week for the Clean Power Plan. On Tuesday, the Supreme Court ruled 5-4 that the rules should neither be implemented nor enforced until the high court itself heard their opponents’ case. This was itself unprecedented: Never before had the Supreme Court stayed a set of regulations before a federal court even heard the initial case about them.

This was an ominous sign for the regulations. “One has to conclude that five justices have decided that the rule must go,” said Seth Jaffe, the former president of the American College of Environmental Lawyers.

But Scalia’s death could change all that. Now there are only four justices who have telegraphed their opposition to the rules. Could the Clean Power Plan now survive, after all?

There are two questions to ask when gaming out the future of this particular case. First, would the Court revisit its stay on the rule, allowing the EPA to proceed to implement the regulations? And second, if the Court does hear the case about the Clean Power Plan, could its new membership change its decision?

As to the first, no legal expert I talked to thought the now-smaller Court was likely to annul its stay.

“There is currently no reason to assume the Court will revisit the stay order,” said Richard Lazarus, an environmental-law professor at Harvard University and a veteran of oral arguments at the Court, in an email. “It is final as voted on by the full Court at the time and is not subject to revisiting any more than any other ruling by the Court before the Justice’s passing.”

The second question is more complicated. The terms of the Court’s stay were broad: It ordered that the Clean Power Plan could only enter into force after the Court itself ruled; or if the D.C. Circuit Court of Appeals heard its case (as it is scheduled to do this summer) and the Supreme Court declined to hear the inevitable appeal.

In the language of the Court, taking up a case is “granting a writ of certiorari,” often shortened to “granting cert.” Unlike in a decision on a case, in which five justices determine how the court rules, only four justices need to vote to grant cert in a case. Most experts thought it was likely that the Court—whatever its makeup—would eventually hear the case.

Then things get more complicated.

“The Senate Republicans have already made it clear that they will not confirm anyone President Obama nominates. So it could fall to the next President to name the next justice. And that makes even higher the stakes in the next presidential election,” said Michael Gerrard, a law professor at Columbia University and the director of the Sabin Center for Climate Change Law, in an email.

“If no Obama appointee is confirmed, and if Hillary Clinton or Bernie Sanders is the next President, the next Justice will presumably join the liberal wing of the court, and there is a good chance that he or she would vote to uphold the Clean Power Plan,” he told me. “That of course assumes that nominee gets confirmed before the case is decided; this could well be a massive and protracted confirmation battle, given the high stakes for so many areas of law.”

If a Republican wins the White House, their Supreme Court nominee would almost certainly join the Supreme Court’s conservative wing. That justice would be unlikely to vote to support the Clean Power Plan—but it wouldn’t matter, because no remaining Republican candidate supports Obama’s climate policies, anyway, so they’d likely be reversed administratively.

There’s some possibility that the Supreme Court could hear the Clean Power Plan case before a ninth justice is appointed. If it then split 4-4, the D.C. circuit’s ruling would stand. But sources cautioned this was less likely.

“The earliest the Supreme Court could possibly hear it for oral argument would likely be next February or March, and it could possibly not be until the following October depending on how long the [D.C. circuit] decision takes,” said Lazarus. He added that if there is still no ninth justice at that time, the Court might opt to delay certain arguments and rulings until there is a full bench.

#### Key to warming

Eduardo Porter 2/16, writes for Economic Scene Column, NYT, "Next Supreme Court Justice Will Be Crucial to Climate Change", 2-16-2016, New York Times, http://www.nytimes.com/2016/02/17/business/economy/next-supreme-court-justice-will-be-crucial-to-climate-change.html?\_r=0, DOA: 2-18-2016, y2k

The United States sure knows how to throw cold water on international harmony.

Just two months have passed since the world’s top diplomats cobbled together the best plan we’ve ever had to start curbing emissions of heattrapping greenhouse gases. Yet already the Supreme Court of the United States said no, delaying much of the Obama administration’s strategy to deliver America’s contribution to the collective effort.

The White House claims it will prevail, assuring a fidgety international community it will deliver on the promises made at the climate meeting in Paris in December. Those commitments proved critical to keeping the diplomacy on track and ultimately producing a deal among more than 185 countries representing more than 98 percent of global emissions.

And yet the Supreme Court’s temporary stay of the administration’s Clean Power Plan — the last decision of global consequence of the right­leaning court on which Justice Antonin Scalia had sat since the Reagan administration — underscores just how far the United States remains from its climate goals. Consider the administration’s own assessments. Even as the American delegation in Paris offered to cut emissions to 26 to 28 percent below their 2005 levels by 2025, the Energy Information Administration of the Department of Energy was offering a different outlook.

Its reference case, based on federal policies on the books at the end of 2014, forecast that emissions of carbon dioxide from energy use (the United States’ main source of greenhouse gases) would not decline but remain flat through 2025 and beyond.

Methane emissions, which account for under 10 percent of greenhouse gases spewed into the atmosphere but trap much more heat than CO2 , could increase 6 percent over the next 10 years, according to the Environmental Protection Agency. Emissions of highly potent hydrofluorocarbons could increase by half.

What’s more, the carbon storage of American forests, which offset as much as 13 percent of the nation’s total greenhouse gas emissions in 2013, could start declining as early as 2020.

These, of course, are not forecasts but projections. Emissions could fall faster because of new regulation, technological breakthroughs, changes in land use and the like. Some of the nation’s most critical policies to combat climate change were passed only last year. A case in point is the Clean Power Plan, the crown jewel of the lot, which would require states to come up with plans to reduce the CO2 emissions from their electric power plants. Still, the Supreme Court’s decision last week to delay the plan — until the United States Court of Appeals in Washington decides on the merits of a challenge by 27 mostly Republican­governed states — underscores just how politically vulnerable the United States’ promises truly are.

Because for all the administration’s claims that it can deliver on its commitments regardless, the fact remains that even under the most optimistic outlook — if the Supreme Court’s stay were to melt away and the Power Plan were to work impeccably — current policies do not get us there. Last month, before the Supreme Court’s decision, the Rhodium Group, a research firm that has performed extensive analysis of climate­change projections, published a report concluding that even if the administration executed all its existing and planned policies with maximum effect, and the most optimistic forecasts for technological development and forest sink capacity were borne out, the United States would still not hit the target. Using different assumptions — say, if the economy grew faster or energy technology didn’t progress as fast — it would remain even further behind. Assuming all the administration’s current and proposed policies were carried out, the analysis suggests that by 2025 American greenhouse gas emissions would be, at best, 23 percent lower than in 2005. In the worst case they would be only 10 percent lower.

That suggests we should hurry. “While the U.S. still has nearly a decade to put additional policy in place,” the report notes, “it will need to do so relatively quickly for the impact to be felt by the time the 2025 pledge comes due.” The pledges offered in Paris are not a magic number. They are important nonetheless. Stiff cuts by the United States, the world’s second­largest emitter, after China, were crucial to holding the international coalition together. These cuts are supposed to be just the beginning of a process of increasingly stringent emissions limits.

How will the United States get there, then? The Rhodium Group’s analysis proposes stricter limits for transportation and for electric power generation, which would remain the largest emitter of greenhouse gases in the country over the next decade even if the Clean Power Plan were put in place. One idea would be further tightening the fuel economy standards for cars and trucks. The report suggests looking at emissions by the industrial sector — the third­largest emitter — which under current policies are expected to increase by 18 percent by 2025. Land use policies to enhance the forest carbon sink and tighter rules to reduce methane emissions from oil and gas could also help.

But these proposals just underscore how the American problem is first and foremost political. It is critical, the report concludes, “that policy makers now engage in a broad exploration and frank discussion of what additional steps can help deliver on America’s climate goals.” It will be difficult to hold this discussion when Congress is run by a party that rejects climate science. We have known about these obstacles for some time. The Obama administration’s plan to repurpose the Clean Air Act rather than propose new legislation to combat climate change acknowledged that the courts offered a better shot than Congress.

And in that regard, the news is not entirely bad. If the Senate were to confirm whomever President Obama nominates to succeed Justice Scalia, one of the most conservative justices on the bench, the Supreme Court would probably become more sensitive to the imperative to combat climate change. That’s not just good news for the Clean Power Plan. It could open the door to more aggressive policies.

### EPA Regs Good—Heg/China

#### EPA reg is key to US green leadership and US-China relations

Jason Marisam 15, Assistant Professor, Hamline University School of Law, “THE INTERNATIONALIZATION OF AGENCY ACTIONS,” FORDHAM LAW REVIEW [Vol. 83, <http://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=5076&context=flr>, DOA: 12-4-15, y2k

The EPA under the Obama Administration has recently sent a very different, more encouraging signal. The signal first came through the EPA’s proposed rule capping greenhouse gas emissions from new coal plants.103 Current market conditions make the construction of new coal plants unattractive.104 The proposed rule would make such construction even less likely because the plants would have to develop and employ expensive technology to limit emissions.105

The proposed rule also offers foreign policy benefits. As the EPA explained, the proposed rule “demonstrate[s] global leadership” in advance of international talks on climate change.106 By taking the costly step of challenging the coal industry, the Obama Administration was signaling its willingness to contribute to the global fight on climate change. As mentioned earlier, this American willingness—the world’s number two carbon polluter—helped to bring about a cooperative agreement between the United States and China, the world’s number one carbon polluter.107 Other nations may respond to this signal by reciprocating and increasing their efforts or willingness to sign and implement an international treaty or multilateral agreement on the matter.

#### Climate leadership is key to global stability and shores up primacy

Louis Klarevas 9, Professor for Center for Global Affairs @ New York University, 12/15, “Securing American Primacy While Tackling Climate Change: Toward a National Strategy of Greengemony,” <http://www.huffingtonpost.com/louis-klarevas/securing-american-primacy_b_393223.html>

As national leaders from around the world are gathering in Copenhagen, Denmark, to attend the United Nations Climate Change Conference, the time is ripe to re-assess America's current energy policies - but within the larger framework of how a new approach on the environment will stave off global warming and shore up American primacy. By not addressing climate change more aggressively and creatively, the United States is squandering an opportunity to secure its global primacy for the next few generations to come. To do this, though, the U.S. must rely on innovation to help the world escape the coming environmental meltdown. Developing the key technologies that will save the planet from global warming will allow the U.S. to outmaneuver potential great power rivals seeking to replace it as the international system's hegemon. But the greening of American strategy must occur soon. The U.S., however, seems to be stuck in time, unable to move beyond oil-centric geo-politics in any meaningful way. Often, the gridlock is portrayed as a partisan difference, with Republicans resisting action and Democrats pleading for action. This, though, is an unfair characterization as there are numerous proactive Republicans and quite a few reticent Democrats. The real divide is instead one between realists and liberals. Students of realpolitik, which still heavily guides American foreign policy, largely discount environmental issues as they are not seen as advancing national interests in a way that generates relative power advantages vis-à-vis the other major powers in the system: Russia, China, Japan, India, and the European Union. ¶ Liberals, on the other hand, have recognized that global warming might very well become the greatest challenge ever faced by (hu)mankind. As such, their thinking often eschews narrowly defined national interests for the greater global good. This, though, ruffles elected officials whose sworn obligation is, above all, to protect and promote American national interests. What both sides need to understand is that by becoming a lean, mean, green fighting machine, the U.S. can actually bring together liberals and realists to advance a collective interest which benefits every nation, while at the same time, securing America's global primacy well into the future. To do so, the U.S. must re-invent itself as not just your traditional hegemon, but as history's first ever green hegemon. Hegemons are countries that dominate the international system - bailing out other countries in times of global crisis, establishing and maintaining the most important international institutions, and covering the costs that result from free-riding and cheating global obligations. Since 1945, that role has been the purview of the United States. Immediately after World War II, Europe and Asia laid in ruin, the global economy required resuscitation, the countries of the free world needed security guarantees, and the entire system longed for a multilateral forum where global concerns could be addressed. The U.S., emerging the least scathed by the systemic crisis of fascism's rise, stepped up to the challenge and established the postwar (and current) liberal order. But don't let the world "liberal" fool you. While many nations benefited from America's new-found hegemony, the U.S. was driven largely by "realist" selfish national interests. The liberal order first and foremost benefited the U.S. With the U.S. becoming bogged down in places like Afghanistan and Iraq, running a record national debt, and failing to shore up the dollar, the future of American hegemony now seems to be facing a serious contest: potential rivals - acting like sharks smelling blood in the water - wish to challenge the U.S. on a variety of fronts. This has led numerous commentators to forecast the U.S.'s imminent fall from grace. Not all hope is lost however. With the impending systemic crisis of global warming on the horizon, the U.S. again finds itself in a position to address a transnational problem in a way that will benefit both the international community collectively and the U.S. selfishly. The current problem is two-fold. First, the competition for oil is fueling animosities between the major powers. The geopolitics of oil has already emboldened Russia in its 'near abroad' and China in far-off places like Africa and Latin America. As oil is a limited natural resource, a nasty zero-sum contest could be looming on the horizon for the U.S. and its major power rivals - a contest which threatens American primacy and global stability. Second, converting fossil fuels like oil to run national economies is producing irreversible harm in the form of carbon dioxide emissions. So long as the global economy remains oil-dependent, greenhouse gases will continue to rise. Experts are predicting as much as a 60% increase in carbon dioxide emissions in the next twenty-five years. That likely means more devastating water shortages, droughts, forest fires, floods, and storms. In other words, if global competition for access to energy resources does not undermine international security, global warming will. And in either case, oil will be a culprit for the instability. Oil arguably has been the most precious energy resource of the last half-century. But "black gold" is so 20th century. The key resource for this century will be green gold - clean, environmentally-friendly energy like wind, solar, and hydrogen power. Climate change leaves no alternative. And the sooner we realize this, the better off we will be. What Washington must do in order to avoid the traps of petropolitics is to convert the U.S. into the world's first-ever green hegemon. For starters, the federal government must drastically increase investment in energy and environmental research and development (E&E R&D). This will require a serious sacrifice, committing upwards of $40 billion annually to E&E R&D - a far cry from the few billion dollars currently being spent. By promoting a new national project, the U.S. could develop new technologies that will assure it does not drown in a pool of oil. Some solutions are already well known, such as raising fuel standards for automobiles; improving public transportation networks; and expanding nuclear and wind power sources. Others, however, have not progressed much beyond the drawing board: batteries that can store massive amounts of solar (and possibly even wind) power; efficient and cost-effective photovoltaic cells, crop-fuels, and hydrogen-based fuels; and even fusion. Such innovations will not only provide alternatives to oil, they will also give the U.S. an edge in the global competition for hegemony. If the U.S. is able to produce technologies that allow modern, globalized societies to escape the oil trap, those nations will eventually have no choice but to adopt such technologies. And this will give the U.S. a tremendous economic boom, while simultaneously providing it with means of leverage that can be employed to keep potential foes in check. The bottom-line is that the U.S. needs to become green energy dominant as opposed to black energy independent - and the best approach for achieving this is to promote a national strategy of greengemony.

#### US-China relations solves extinction

Frederick Kempe 13, President of Atlantic Council, “China-US Cooperation: Key to the Global Future,” September, 2013, DOA: 10-26-15, y2k

The megatrends summarized above constitute a relatively predictable set of challenges facing individuals and nations, especially China and the United States. But they are not the only factors that will influence developments in the next two decades. The relatively predictable megatrends will interact with a number of critical uncertainties. Examples include: • The future of the global economy is volatile. The developed countries, especially in the Eurozone, may face a prolonged period of recovery. The developing countries, including China and India, face a “middle income trap.” The world could experience growing economic nationalism and trade protectionism as well as an accelerating adjustment of international industrial division of labor as China refocuses on domestic consumption-led growth, other nations increasingly displace China as the low-cost provider, and new manufacturing technologies and lower energy costs encourage the return of manufacturing to the United States and other developed countries. In addition, major economic crises could result from the increasing pressure on resource availability discussed previously. • The accelerating pace of technological development is likely to change the global operating environment for foreign policy and national security over the next two decades with uncertain consequences. A wide range of emerging technologies will affect the political, social, economic and security trajectories of states, international relations, and the international system, as have the Internet, mobile communications technology, and social media. These technologies range from new energy systems and manufacturing technologies such as 3D printing to bio- and nanotechnology breakthroughs affecting agricultural productivity, human enhancement, robotics, and information availability. On the negative side of the ledger, cyber hacking, cyber warfare, and genomics-enabled bioterrorism have the potential to be highly disruptive. • Nationalistic responses to increasing mutual vulnerability are likely as growing global interconnectedness and interdependence ensure that developments anywhere in the world, from slowly-developing threats like climate change to short-term crises like the 2008 financial crisis, can affect most nations and citizens yet be largely, if not completely, outside the control of individual states. National responses to common challenges and threats could be “each nation for itself” actions to achieve narrow national interests at the expense of other states and the common good. • Unpredictable events such as natural disasters, extreme weather events, pandemics, or nuclear weapon use by terrorists could be game-changers. An H5N1 or similar pandemic could shut down global transportation and kill tens of millions or more with a huge impact on the global economy, politics, and security. A series of extreme weather events, foreshadowed by Hurricane Sandy’s impact on the United States, could change the trajectories of global political efforts to deal with the consequences of climate change. • The future of both China and the United States is uncertain. China has many internal challenges that could limit its willingness to be a “joint responsible stakeholder” with the United States to meet global challenges and resolve regional conflicts. Similarly, the United States faces major economic challenges that could lead to long-term slow growth, a more inward focus, and a less active and influential role in catalyzing cooperation on global challenges. Conversely, one or both countries could achieve considerable success in its/their domestic arena(s) and feel emboldened to lead the transformation of the global system. • Conflicts could become more common and more intense as a result of social unrest, religious extremism, reduced provision of public goods, power shifts, and individual empowerment. The world’s security and stability may become increasingly fragile as a result of state failure, nuclear proliferation, or dramatic acts of terrorism, especially in unstable regions like the Middle East and South Asia. • Regional instability may have global impact. A major conflict in the Middle East, including over Iran’s nuclear weapons, could draw in outside powers, disrupt oil supplies, and send the global economy into recession. Failure to resolve or indefinitely shelve territorial disputes in East and Southeast Asia could limit the ability of regional states to cooperate in global as well as regional efforts to cope with global challenges. Military conflict over these disputes also could destabilize the AsiaPacific region with grave consequences for the global economy and international stability. An existential crisis of the European Union could disrupt the cohesiveness of what is now the world’s largest economy IV. Governance and Cooperation Challenges of Megatrends and Uncertainties Although no one can predict with confidence exactly how events will play out in the years ahead, we can be confident that the challenges and choices facing decision-makers at all levels and in all countries will be shaped by the interplay of megatrends, known uncertainties, unexpected “black swan” events, and the decisions of governments and nongovernmental actors. Waiting to see how events unfold is a possible but undesirable choice because waiting is, in effect, a decision to do nothing and hope for the best. We can and must do better than that by working to shape events in ways that reduce uncertainty, avoid or ameliorate undesirable trajectories, and increase the likelihood of win-win outcomes. Some of the challenges posed include: • Volatile global economy: Slower economic growth and potential crises such as a Eurozone meltdown, another global financial crisis, or a sustained spike in food prices could slow or reverse progress toward greater prosperity and better lives for more people. Growing inequality (worsening GINI coefficients1 ) could further compound the challenges. Although the rich and the poor alike may become richer, the absolute gaps between them likely will widen, both within and among countries and regions. Moreover, the middle class may continue to be squeezed not only in developed countries but also in developing countries despite more rapid economic growth, especially as the gap widens between the middle class and the super rich. • Increasing internal pressures on governments: Demands on governments at all levels likely will increase faster than the availability of resources required to satisfy them. More people with rising expectations and greater awareness of conditions at home and elsewhere will have more tools, especially social media, to organize and put pressure on governments to provide more services and opportunities. The rising middle class in the emerging economies likely will expect and demand more and better quality food and water, more reliable supplies of cleaner energy, improved infrastructure, and healthier environments. Governments could find it difficult to meet rising expectations, however, especially growing demand for increasingly limited resources, which will push prices upward and exacerbate economic and social instability. At the same time, some of the poorest countries with ineffective governments may be pushed into internal conflict and state failure by tribal, ethnic, and religious strife as well as economic and environmental stresses. These internal conflicts could lead to regional instability as environmental and economic migrants spill into neighboring states. Global cooperation gap widening: Increasing globalization and interdependence could make it more difficult for national governments to manage new challenges on their own, but transnational institutions will be increasingly ill-suited or even incapable of meeting twentyfirst century challenges. To meet the growing challenges, existing global mechanisms, most of which are legacy institutions from the postWorld War II era designed to solve problems from the inter-war period, must be reformed or replaced. That will not be easy. There are 140 more countries today than there were when the global system was last reformed in the 1940s and all feel entitled to a seat at the table when decisions are made that will affect their own destinies. This widely shared ethos of democratic participation of all nations makes it difficult to strike a balance between equity of representation and efficacy of decision-making. • Domestic pressures and weak national governments: Governments may become less willing or able to cooperate with other nations as a result of domestic pressures on leaders to pursue narrow national interests. This will increase the likelihood of nations engaging in zero-sum behavior that will make it even more difficult to deal with the most challenging megatrends. • Extremism and fracturing of the nationstate: Extremism and separatism are likely to be fueled by individual empowerment and tribal, ethnic, religious, and other identities, strengthened by ubiquitous social media. The power and authority of the nation-state is likely to be increasingly circumscribed by the rising power of non-state actors and the growing importance of transnational challenges beyond the state’s control. The state is being challenged in many cases by separatist and extremist forces, including religious fundamentalists in Waziristan and Dagestan and regional nationalists in Catalonia and Scotland. • “Black swans” and lack of robust international institutions: Failure to establish robust international institutions and habits of cooperation could reduce the international community’s ability to respond to major crises, including black swan events. The latter are high impact but either improbable or simply unpredictable calamities such as pandemics, nuclear weapon or biological warfare attacks, or cyber meltdowns. If China and the United States act as rivals and give priority to parochial interests, it may be impossible for the international community to successfully confront the major challenges of the next twenty years. Owing to their size and importance in the global system, what China and the US do together as well as individually will profoundly affect the international community’s ability to engage in robust international cooperation in science and technology to find solutions to the world’s most pressing problems.

### AT: 4-4 Decision Solves

#### SCOTUS will delay

Meyer 2/14- associate editor at The Atlantic (Robinson, “Will a Reconfigured Supreme Court Help Obama's Clean-Power Plan Survive?”, The Atlantic, 2/14/16, http://www.theatlantic.com/politics/archive/2016/02/antonin-scalia-clean-power-plan-obama-climate-change/462807/)//WK

There’s some possibility that the Supreme Court could hear the Clean Power Plan case before a ninth justice is appointed. If it then split 4-4, the D.C. circuit’s ruling would stand. But sources cautioned this was less likely. “The earliest the Supreme Court could possibly hear it for oral argument would likely be next February or March, and it could possibly not be until the following October depending on how long the [D.C. circuit] decision takes,” said Lazarus. He added that if there is still no ninth justice at that time, the Court might opt to delay certain arguments and rulings until there is a full bench.

#### Doesn’t solve—can’t predict lower court ruling

Drajem 2/15- Bloomberg reporter, editor of First Word Energy (Mark, “Supreme Court and EPA’s Clean Power Plan”, Bloomberg, 2/15/16, http://about.bgov.com/blog/scalias-sudden-death-cuts-legal-risks-to-epas-clean-power-plan/)//WK

What’s not clear is how a Republican-led Senate would handle an Obama appointee to the high court. (Early indications are they will try block whomever Obama chooses.) But there’s two things that are clear. Obama would never appoint a justice with views on the environmental regulation anywhere near those of Scalia; and, two, a delay by the GOP-led Senate would not stop EPA rules. A 4-4 deadlock, if that happens, keeps a lower-court ruling in place. (Of course, we don’t know yet how a lower court will rule; predicting judicial decisions is a fool’s errand.)

### AT: Garland Bad for Environment

#### They’re wrong—he’s ruled with environmentalists

Noah and Mahoney 3/16- correspondents for Politico (Timothy and Brian, “How liberal is Merrick Garland?”, Politico, 3/16/16, http://www.politico.com/story/2016/03/supreme-court-merrick-garland-220904)//WK

As chief judge of the nation’s most important appellate court, Supreme Court nominee Merrick Garland has sided with President Barack Obama’s environmental regulators against mercury-spewing power plants, supported the administration’s crackdown on for-profit colleges and issued multiple rulings that pleased organized labor. Those decisions might suggest Garland is a doctrinaire liberal — the left’s answer to Antonin Scalia. But in fact, the appellate court judge blends a penchant for judicial restraint more frequently associated with conservatives with a deference to executive power more typical of liberals. “He has a reputation for being a judge’s judge rather than a liberal’s liberal,” according to Yale law professor Akhil Amar, who said his “very best students every year all apply to him” for clerkships, regardless of whether they’re liberal or conservative.

### AT: Stay Kills CPP

#### This arg is empirically denied—EPA currently preparing rollout

Revesz 3/16- Director of the American Law Institute and a law professor and dean emeritus at the New York University School of Law (Richard, “Supreme Court ruling on Clean Power Plan doesn't halt EPA action or change timeline”, The Hill, 3/16/16, http://thehill.com/blogs/pundits-blog/energy-environment/273189-supreme-court-ruling-on-clean-power-plan-doesnt-halt)//WK

History shows that a "stay" doesn’t stop agency efforts Before the Supreme Court's decision, the EPA released an initial draft — in a separate docket from the Clean Power Plan itself — of model trading rules for states seeking to use emissions trading systems to meet their carbon reduction targets. (The agency also released a draft federal plan outlining compliance options for states that do not submit their own plans to the EPA.) The agency planned to finalize the model trading rules during the summer of 2016 in order to support local planning efforts, which are continuing in many states (including several that are opposed to the Clean Power Plan). Legal precedent suggests that the EPA has the right to continue this work. Opponents of the rule have argued to the contrary. The attorneys general of Texas and West Virginia (two of the states leading the challenge to the Clean Power Plan in court) recently claimed that "the States, their agencies, and EPA should put their pencils down." Jeff Holmstead, a former EPA official under President George W. Bush who is representing opponents of the Clean Power Plan, argued that further work by EPA would be the equivalent of "thumbing your nose at the Supreme Court." Sen. James Inhofe (R-Okla.) recently made similar comments. But the EPA has taken actions to implement stayed rules under both the Republican and Democratic administrations over a period spanning almost two decades. After the U.S. Court of Appeals for the D.C. Circuit issued a stay on the EPA's Cross-State Air Pollution Rule in 2011, the agency continued work on the rule by adjusting state emissions budgets and resolving issues related to modeling. At the time, the EPA argued that its action "is consistent with and is unaffected by the Court's Order staying the [rule]." In 2003, under the George W. Bush administration, the EPA also declined to "put its pencil down" when faced with a stay of its rule adding an equipment replacement provision to the Clean Air Act's New Source Review program. Indeed, while the stay was in place, the agency solicited public comments on multiple issues related to the rule. (Holmstead was the EPA's assistant administrator for air and radiation at that time.) During the Clinton administration in 1999, the D.C. Circuit stayed the NOx SIP (Nitrogen Oxides State Implementation Plan) Call, a rule limiting nitrogen oxides emissions affecting downwind states. While the stay was in place, the agency pursued a related regulation, but gave states the option to voluntarily comply with the stayed rule instead. Recent claims that the EPA must halt all work on the Clean Power Plan would be persuasive if the court had granted an injunction rather than a stay. The nature of these remedies is very different, but the opponents of the Clean Power Plan treat them as if they were equivalent. As Chief Justice John Roberts wrote in the majority opinion in Nken v. Holder (2009), a stay "halt[s] or postpon[es] some portion of the proceeding, or ... temporarily divest[s] an order of enforceability," whereas an injunction "directs the conduct of a party, and does so with the backing of [a court's] full coercive powers." In short, an injunction is a binding restriction on the conduct of the agency. A stay holds much less power, focusing only on the enforceability of the rule.

## Legitimacy Scenarios

### Judicial Independence Scenario

#### Vacancy threatens judicial independence

The Boston Globe 2/13, "GOP demands threaten the integrity of US Supreme Court", 2-13-16, BostonGlobe, https://www.bostonglobe.com/opinion/editorials/2016/02/13/gop-demands-threaten-integrity-supreme-court/WEvZ95BDsSule6W9aaZz4O/story.html, DOA: 2-18-2016, y2k

WHAT WOULD ANTONIN Scalia think about how his seat on the court should be filled now? Ever the originalist, the late Supreme Court justice, who was found dead at a resort in Texas on Saturday after serving 29 years as the eloquent lodestar of the court’s conservative wing, was a leading exponent of the idea that the words of the Constitution are meant to be taken literally. And the Constitution says the president will nominate justices to fill openings on the court – not that he will do so only in odd-numbered years, or only at the beginning of his term, or only when Ted Cruz thinks he should.

So it’s an odd way to pay homage to Scalia that Cruz, Marco Rubio, and Senate Majority Leader Mitch McConnell called on President Obama not to nominate a replacement for Scalia. Instead, they are urging him to leave that task to his successor, which they hope will be a Republican. There is no legitimate reason for Obama to wait or for the Senate to refuse to consider his nominee. And one doesn’t need to share Scalia’s originalism to object to such an unusual demand, which threatens to weaken the court’s independence in the American political system.

Leaving the seat vacant would, as a practical matter, risk a full year of ~~paralysis~~ gridlock on the nation’s highest court, making it harder for the court to decide cases; expect a lot of 4-4 ties if the seat stays empty. But the far bigger threat is to the court’s own standing. It has sometimes been hard, in recent years, to view the court as nonpartisan, but putting a quota on the number of justices Obama may nominate would effectively finish off the idea that the court isn’t a political organ.

One predictable objection is that an Obama appointment would change the ideological makeup of the court, moving it leftward — which, of course, is probably true. But there’s no “right” lineup that the court should be expected to maintain. Some presidents appoint many justices, some appoint none. It’s arbitrary — and so is the current composition of the court, shaped, as it always has been, by fate and chance that determines when openings occur.

Most Democrats, of course, want Obama to nominate a replacement just as badly as some Republicans don’t. Harry Reid has already said as much, urging Obama to quickly pick a nominee. But his views may easily be brushed off as partisan. The voice that really needs to be heard is that of Chief Justice John Roberts, who as a constitutional officer is responsible for leading the judiciary. The GOP’s demand, if met, would constitute court-packing in reverse. For the court’s own sake, it cannot be allowed.

#### US judicial legitimacy is key to global democracy

Zoccola ‘06 (Barbara, President of the Memphis Bar Association, “Voters hold the key for judicial fairness” July 23, The Commercial Appeal, lexis)

It matters because the health of our American democracy depends on impartial judges who apply the law fairly and without regard to the prevailing political mood or opinion. More than 200 years ago, the Founders of our nation designed a constitutional democracy based on a system of checks and balances, a form of government that is now the model for the world, especially for new democracies that have emerged in recent years. A fundamental part of this system is the existence of an independent judiciary - judges who are able to act without concern for the day-to-day whims of politics and election-focused politicians, to protect every citizen's individual liberties and to prevent a tyranny of the majority. Unfortunately, a Harris interactive poll conducted in July 2005 for the American Bar Association found that only 55 percent of the respondents correctly identified the three branches of government and only 64 percent correctly identified the meaning of "checks and balances."

#### Consolidation solves WMD conflict

Halperin 11 (Morton H., Senior Advisor – Open Society Institute and Senior Vice President of the Center for American Progress, “Unconventional Wisdom – Democracy is Still Worth Fighting For”, Foreign Policy, January / February, http://www.foreignpolicy.com/articles/2011/01/02/unconventional\_wisdom?page=0,11)

As the United States struggles to wind down two wars and recover from a humbling financial crisis, realism is enjoying a renaissance. Afghanistan and Iraq bear scant resemblance to the democracies we were promised. The Treasury is broke. And America has a president, Barack Obama, who once compared his foreign-policy philosophy to the realism of theologian Reinhold Niebuhr: "There's serious evil in the world, and hardship and pain," Obama said during his 2008 campaign. "And we should be humble and modest in our belief we can eliminate those things."

But one can take such words of wisdom to the extreme-as realists like former Secretary of State Henry Kissinger and writer Robert Kaplan sometimes do, arguing that the United States can't afford the risks inherent in supporting democracy and human rights around the world. Others, such as cultural historian Jacques Barzun, go even further, saying that America can't export democracy at all, "because it is not an ideology but a wayward historical development." Taken too far, such realist absolutism can be just as dangerous, and wrong, as neoconservative hubris. For there is one thing the neocons get right: As I argue in *The Democracy Advantage*, democratic governments are more likely than autocratic regimes to engage in conduct that advances U.S. interests and avoids situations that pose a threat to peace and security. Democratic states are more likely to develop and to avoid famines and economic collapse. They are also less likely to become failed states or suffer a civil war. Democratic states are also more likely to cooperate in dealing with security issues, such as terrorism and proliferation of weapons of mass destruction. As the bloody aftermath of the Iraq invasion painfully shows, democracy cannot be imposed from the outside by force or coercion. It must come from the people of a nation working to get on the path of democracy and then adopting the policies necessary to remain on that path. But we should be careful about overlearning the lessons of Iraq. In fact, the outside world can make an enormous difference in whether such efforts succeed. There are numerous examples-starting with Spain and Portugal and spreading to Eastern Europe, Latin America, and Asia-in which the struggle to establish democracy and advance human rights received critical support from multilateral bodies, including the United Nations, as well as from regional organizations, democratic governments, and private groups. It is very much in America's interest to provide such assistance now to new democracies, such as Indonesia, Liberia, and Nepal, and to stand with those advocating democracy in countries such as Belarus, Burma, and China.

It will still be true that the United States will sometimes need to work with a nondemocratic regime to secure an immediate objective, such as use of a military base to support the U.S. mission in Afghanistan, or in the case of Russia, to sign an arms-control treaty. None of that, however, should come at the expense of speaking out in support of those struggling for their rights. Nor should we doubt that America would be more secure if they succeed.

### Democracy Scenario

#### Blocking Obama’s replacement power-bombs democracy

Pengelly 2-13, (writer @ The Guardian, Supreme court justice Antonin Scalia dies: political and legal worlds react, www.theguardian.com/law/2016/feb/13/supreme-court-justice-antonin-scalia-dead-at-79)

But in a brief statement on Saturday night, he also responded to Republican threats to block Scalia’s replacement by warning they risked undermining a *cornerstone of US democracy.* “I plan to fulfill my constitutional responsibility to nominate a successor in due time,” he said, during a weekend trip to Palm Springs. Obama, who is in the final year of his presidency, said: “There will be plenty of time for me to do so and for the Senate to to fulfill its responsibility to give that person a fair hearing and a timely vote.” “These are responsibilities that I take seriously, as should everyone, they are bigger than anyone party; they are about our democracy. They are about the institution to which justice Scalia dedicated his professional life and making sure it continues to function as the beacon of justice that our founders envisaged.” Before Obama spoke, Senate majority leader Mitch McConnell said the next president should be the one to nominate a replacement to a court which is now evenly balanced between four liberal and four conservative justices. With issues ranging from immigration reform and climate change on the court’s agenda – and issues like abortion and gun control being fought over in the lower courts – the *next appointment is pivotal*.

#### Global legitimacy of the Supreme Court solves global war, terror, and failed states

Feldman 8 [Noah Feldman, a contributing writer for the magazine, is a law professor at Harvard University and an adjunct senior fellow at the Council on Foreign Relations, “When Judges Make Foreign Policy”, NEW YORK TIMES, 9—25—08, www.nytimes.com/2008/09/28/magazine/28law-t.html]

Looking at today’s problem through the lens of our great constitutional experiment, it emerges that there is no single, enduring answer to which way the Constitution should be oriented, inward or outward. The truth is that we have had an inward- and outward-looking Constitution by turns, depending on the needs of the country and of the world. Neither the text of the Constitution, nor the history of its interpretation, nor the deep values embedded in it justify one answer rather than the other. In the face of such ambiguity, the right question is not simply in what direction does our Constitution look, but where do we need the Constitution to look right now? Answering this requires the Supreme Court to think in terms not only of principle but also of policy: to weigh national and international interests; and to exercise fine judgment about how our Constitution functions and is perceived at home and abroad. The conservative and liberal approaches to legitimacy and the rule of law need to be supplemented with a healthy dose of real-world pragmatism. In effect, the fact that the Constitution affects our relations with the world requires the justices to have a foreign policy of their own. On the surface, it seems as if such inevitably political judgments are not the proper province of the court. If assessments of the state of the world are called for, shouldn’t the court defer to the decisions of the elected president and Congress? Aren’t judgments about the direction of our country the exclusive preserve of the political branches? Indeed, the Supreme Court does need to be limited to its proper role. But when it comes to our engagement with the world, that role involves taking a stand, not stepping aside. The reason for this is straightforward: the court is in charge of interpreting the Constitution, and the Constitution plays a major role in shaping our engagement with the rest of the world. The court therefore has no choice about whether to involve itself in the question of which direction the Constitution will face; it is now unavoidably involved. Even choosing to defer to the other branches of government amounts to a substantive stand on the question. That said, when the court exercises its own independent political judgment, it still does so in a distinctively legal way.For one thing, the court can act only through deciding the cases that happen to come before it, and the court is limited to using the facts and circumstances of those cases to shape a broader constitutional vision. The court also speaks in the idiom of law — which is to say, of regular rules that apply to everyone across the board. It cannot declare, for instance, that only this or that detainee has rights. It must hold that the same rights extend to every detainee who is similarly situated. This, too, is an effective constraint on the way the court exercises its policy judgment. Indeed, it is this very regularity that gives its decisions legitimacy as the product of judicial logic and reasoning. Why We Need More Law, More Than Ever So what do we need the Constitution to do for us now? The answer, I think, is that the Constitution must be read to help us remember that while the war on terror continues, we are also still in the midst of a period of rapid globalization. An enduring lesson of the Bush years is the extreme difficulty and cost of doing things by ourselves. We need to build and rebuild alliances — and law has historically been one of our best tools for doing so. In our present precarious situation, it would be a terrible mistake to abandon our historic position of leadership in the global spread of the rule of law. Our leadership matters for reasons both universal and national. Seen from the perspective of the world, the fragmentation of power after the cold war creates new dangers of disorder that need to be mitigated by the sense of regularity and predictability that only the rule of law can provide. Terrorists need to be deterred. Failed states need to be brought under the umbrella of international organizations so they can govern themselves. And economic interdependence demands coordination, so that the collapse of one does not become the collapse of all. From a national perspective, our interest is less in the inherent value of advancing individual rights than in claiming that our allies are obligated to help us by virtue of legal commitments they have made. The Bush administration’s lawyers often insisted that lawwas a tool of the weak, and that therefore as a strong nation we had no need to engage it. But this notion of “lawfare” as a threat to the United States is based on a misunderstanding of the very essence of how law operates. Law comes into being and is sustained not because the weak demand it but because it is a tool of the powerful — as it has been for the United States since World War II at least. The reason those with power prefer law to brute force is that it regularizes and legitimates the exercise of authority. It is easier and cheaper to get the compliance of weaker people or states by promising them rules and a fair hearing than by threatening them constantly with force. After all, if those wielding power really objected to the rule of law, they could abolish it, the way dictators and juntas have often done the world over.

### Nepali Scenario

#### Nepal *models* a functioning judiciary

Scharf 9, Professor Michael P. Scharf, PILPG Managing Director, John Deaver Drinko — Baker & Hostetler Professor of Law and Director of the Frederick K. Cox International Law Center at the Case Western Reserve University School of Law, BRIEF OF THE PUBLIC INTERNATIONAL LAW & POLICY GROUP AS AMICUS CURIAE IN SUPPORT OF PETITIONERS, www.americanbar.org/content/dam/aba/publishing/preview/publiced\_preview\_briefs\_pdfs\_09\_10\_08\_1234\_PetitionerAmCuPILPG.authcheckdam.pdf

II. PILPG’S EXPERIENCE ADVISING FOREIGN GOVERNMENTS AND JUDICIARIES ILLUS- TRATES THE IMPORTANCE OF SUPREME COURT PRECEDENT IN PROMOTING RULE OF LAW IN FOREIGN STATES DURING TIMES OF CONFLICT. During PILPG’s work providing pro bono legal assistance to foreign governments and judiciaries on the rule of law in conflict and post-conflict settings, clients frequently request guidance on U.S. laws and the role of the judiciary in the U.S. system of governance. In recent years, as states have watched the U.S. tackle the legal issues surrounding the war on terror, foreign governments and judiciaries have expressed keen interest in, and have demonstrated reliance on, the legal mechanisms the U.S. has adopted to address the challenges presented in this new form of conflict. The U.S. Government, under the guidance of this Court, has set a strong example for upholding the rule of law during times of conflict, and foreign governments have followed this lead. When states follow the example set by the U.S. Government, the U.S. can benefit greatly. The U.S. Government recognizes that foreign states with strong and independent judicial systems and a commitment to the rule of law make the most stable allies and partners. Stable allies and partners in turn create the best environment for U.S. business investments and commerce and provide the most safety for Americans traveling abroad. Through PILPG’s work with foreign governments, PILPG has observed that U.S. rule of law interests are best represented abroad when foreign governments view the U.S. as committed to the primacy of law. A. Foreign Governments Rely on U.S. Precedent to Promote Rule of Law in Times of Conflict. As noted above, PILPG has advised over two dozen states and governments on the negotiation and implementation of peace agreements and the drafting of post-conflict constitutions. PILPG has also advised all the international war crimes tribunals. PILPG frequently serves as pro bono counsel to foreign governments and judiciaries, advising those governments and judiciaries on important legal issues during times of transition. PILPG’s unique relationship with its clients provides the organization’s members with rare insight into the decision-making process of foreign governments and judiciaries and the influence that the U.S. and this Court have on promoting rule of law during times of conflict. The following examples, from Uganda, Nepal, Somaliland, and South Sudan, illustrate some of the ways in which foreign governments and judiciaries rely on the leadership of the U.S. and this Court to promote rule of law in their home states. i. Uganda In Uganda, the precedent established by this Court in Hamdan v. Rumsfeld, 548 U.S. 557 (2006), and Boumediene v. Bush, 128 S.Ct. 2229 (2008), influenced judges and legislators to incorporate the principles of judicial review and enforceability in their domestic war crimes bill. In 2008 members of PILPG began working with the Government of Uganda to establish a War Crimes Chamber within the Ugandan High Court to prosecute members of the Lord’s Resistance Army (LRA). The LRA is an insurgent group operating in Northern Uganda, which, over the past twenty-five years, has kidnapped over sixty thousand young Ugandan girls and boys, and forced them to be sex slaves and child soldiers. PILPG worked closely with the Ugandan government to establish a judicial mechanism to address this violence in accordance with international legal standards. After discussing with PILPG this Court’s holdings in Hamdan and Boumediene, the Ugandan government decided to include a provision in their bill establishing the War Crimes Chamber that provides for appeal to Uganda’s highest court. Following the example of the U.S., the Ugandans felt that it was important that such high profile and controversial cases involving war crimes and terrorism should be subject to the highest level of judicial review in order to promote independence, fairness, and legitimacy. Provided that this Court issues a robust interpretation of Boumediene, the Ugandan precedent is likely to be repeated by other countries, such as Liberia, which are also contemplating the establishment of judicial bodies to prosecute war crimes and terrorism. ii. Nepal This Court has also served as a model for the nascent Nepal judiciary. Nepal’s 2006 Comprehensive Peace Agreement ended a decade-long civil conflict between Maoist insurgents and government forces. The Agreement provided for the election of a Constituent Assembly to serve as an interim government and to draft a new constitution for Nepal. Elected in May 2008, the Constituent Assembly is currently in the midst of the constitution drafting process. PILPG is advising the Assembly’s drafting committees on a number of issues, among them the structure, composition, and role of the judiciary. Members of the Assembly have repeatedly expressed the view that the judiciary is a crucial component to fully and effectively implementing the constitution and ensuring the balance of power in the new government. In technical discussions with members of the Committee on the Judicial System, PILPG discussed several aspects of the U.S. judicial model, including: the U.S. federal and state judicial structures; the types of cases the Supreme Court can adjudicate; the powers and functions of the U.S. judicial branch; the devolution of judicial power in the U.S.; the role of the Supreme Court in establishing precedent for all U.S. courts; and the mechanisms used by the Supreme Court to ensure enforcement of its decisions in the lower courts. Members of the Committee on the Judicial System were particularly interested in how the U.S. federal court system operates at the national level, and how the U.S. model could be applied in Nepal as Nepal moves towards decentralizing its court system. As the Constituent Assembly moves forward with developing constitutional and judicial structures for Nepal, members will continue to look to the functioning of this Court for guidance on the role of a high court in a federal system, particularly how this Court enforces key decisions in the lower courts.

#### That’s key to prevent ethnic conflict

Føllesdal 13, Professor at University of Oslo, Federalism and Human Rights in Nepal's Constitutional Design: Challenges for the Judiciary  [Andreas Follesdal](http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=1505725" \t "_blank" \o "View other papers by this author)  University of Oslo; University of Oslo - Norwegian Centre for Human Rights http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2359970

Note again that such **mechanisms** will typically **require** that **the judiciary plays important roles to maintain trust that the procedures are not abused. This increases** the **need for an independent** and **trustworthy judiciary**. 5. **Conclusion** These reflections have sought to illuminate some aspects of the new roles and responsibilities of the judiciary, when it seeks to interpret and apply federal features in the new, human rights-respecting constitution. **Human rights protections combined with federal elements of Nepal’s new constitution must serve to prevent future domination**, especially by the centres, **over** the **many ethnic groups and castes**. There are reasons to hope that this may be the result of judicious incorporation of some of the four different federal elements culled from the European federal tradition: **Constitutional and Political Territorial arrangements, Minority Rights, and systems of Minority Representation.** To select, fine tune and combine some of these federal features into a sustainable and just constitution that is recognizably federal is one of the important obligations of the Constitutional Assembly. It must braid a Constitution that will protect and promote the best interests of the braid that is the Nepali people and peoples. **It is then the task of an independent judiciary**, together with the legislative powers, well trained in the particularities of federalism and human rights protections, **to ensure that the constitution** indeed **will help create a Nepal free from domination from all centres of power, central as well as regional.**

#### It’s accelerating now and will collapse Nepal

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Although Nepal is no stranger to crises, the one currently seizing the country risks turning it into a failed state. On May 27, the 601-member legislature, which had been directed to write a new constitution for what is now a democratic republic, missed its deadline for the fourth time since it was created in 2008. Hours before the deadline, after the Supreme Court refused to grant another extension, the Maoist prime minister, Babur/am Bhattarai, dissolved the legislature, known as the Constituent Assembly, and scheduled nationwide elections for Nov. 22. Although averting imminent political disaster and violence, the call for elections is unlikely to bring consensus among the self-interested and fractious political leaders, and is quite likely to produce an even more divided legislature.

The fitful struggle to develop a constitution both epitomizes and exacerbates the country’s ethnic, religious, geographical, caste and class divisions. More than 90 languages are spoken in this country, about the size of Illinois. Buddhists and Muslims are sizable minorities among the largely Hindu population. Lower-caste people and rural residents have been historically marginalized; the grievances run deep. However, instead of unifying the country, constitution-drafting has become a frenzied contest to secure special privileges for one’s own community.

By making promises they can’t fulfill, politicians are losing control of the very animosities they’ve whipped up. Political parties have organized paralyzing protests, with barricades and roadblocks, to demand, or oppose, separate ethnic- and caste-based states within a federal system. The protests have shut down commercial activity across a country that can ill afford such losses: with a per-capita gross domestic product of $490, Nepal is one of the poorest countries in the world; unemployment is at 45 percent.

The parties are using criminal groups to recruit stick-wielding youths to protest. Induced by a fistful of rupees, a rare treat of a meat meal and an illusion of empowerment, these youth have roughed up drivers and set fire to vehicles that attempt to pass the barriers. Some groups have attacked journalists. Reinforced by former fighters, the Maoist party is among the most effective in demonstrating its street might. Fearing a loss of power, the traditional economic and political elite, the Brahmin and Chhetri castes, who dominate the Nepali Congress Party, have begun to emulate the Maoists’ street tactics.

On Monday, in a move symptomatic of the mistrust and cynicism, dozens of political parties, including the Nepali Congress, raised suspicions about the Maoists’ motives in dissolving the Constituent Assembly and called for protests against its dissolution. Few Nepalis expect the present situation to explode into another civil war, but increasingly brazen and regular acts of violence in the capital demonstrate that lawlessness has reached crisis proportions.

With most institutions malfunctioning and the system of patronage deeply ingrained, bribery and political connections rule the day. Individual acts of courage against corruption are cause for hope, but to fully restore the rule of law, and respect for it, Nepal needs to step up its efforts to improve public integrity. A prominent anti-corruption agency has been leaderless for over a year as parties bicker over who should lead it.

#### The impact is Himalayan war

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India, dealing with its own virulent Maoist insurgency, gave Nepal’s revolutionaries shelter and safe passage—a strategy designed at once to co-opt them and also use them against a king they found too independent-minded. But even India was surprised by the victory of the Maoist party in 2008 elections for a Constituent Assembly. That assembly, in one of its first acts, voted to turn Nepal from a monarchy to a republic. A messy transition and political deadlock followed, leading to the dissolution of that assembly, and results from a new election not expected before the end of 2013. However, after being elected to power in 2008, Maoist leader Pushpa Kamal Dahal fell out with his erstwhile Indian handlers. New Delhi remains suspicious of Beijing’s behind-the-scenes moves to court India’s smaller neighbors, and is wary of Chinese inroads in trade and investment in Sri Lanka, Bangladesh, and Nepal. In the past, both China and India have backed a less-than-democratic absolute monarchy in Nepal because it provided the stability both needed in a Himalayan buffer state. Neither of Nepal’s large neighbors are overtly for or against democracy. They simply want to ensure that whatever political system prevails in Nepal neither provokes political volatility nor destabilizes the region.

#### That goes nuclear

Poudel 2 (Keshab, Looming Uncertainty, The National NewsMagazine, 21(34), 3-8,

http://www.nepalnews.com.np/contents/englishweekly/spotlight/2002/mar/mar08/national2.htm)

Following the September 11 terrorist attacks, however, the United States and western European countries have been expressing solidarity with Nepal. The visit of US Secretary of State Colin Powell and expressions of concern from other western powers over the last three months underscore how the dimensions of violence in Nepal has extended beyond its frontiers. After the government imposed the state of emergency and the Maoist launched deadly assaults in Achham and Salyan districts, western powers have increased their interest in the kingdom. The growing concern expressed by Washington and European powers is understandable, as escalating violence and instability in Nepal could heighten the possibility of external intervention. Such intervention from either of Nepal's two neighbors — India and China — may trigger a direct conflict between the two. Even an indirect conflict between the two Asian powers could prove to be more dangerous than the confrontation between India and Pakistan. Foreign-relations experts say the recent visit of British Foreign Office Minister Ben Bradshaw to Nepal and US Ambassador Michael E. Malinowski trip to Achham and Salyan are clear indicators of Nepal's geo-strategical importance. Another senior US diplomat, A. Peter Burleigh, spoke more candidly about US concerns over the possibility of a prolonged confrontation. "[W]hen situations arise that challenge that positive world order, and which can be addressed by a collective response, it is the responsibility and obligation of all of our countries to come together to restore and preserve the peace," said Ambassador Malinowski in an address to a seminar on South Asian Peace Operations. "Here in Nepal, as we all know, there is no peace. But I do believe that there are lessons for both those of us who live in Nepal and for the international community," he said. Nepal's Position in South Asia Nepal has been ensnared in political instability following the restoration of democracy in 1990. After the Maoist insurgency began in 1996, the kingdom's economic, security and political processes have been thrown into a tangle. According to the Central Bureau of Statistics, Nepal has a length of 885-km (east-west) and a non-uniform mean width of 193-km (north-south). The kingdom shares a frontier of more than 1400 km with China in north and more than 1600 km with India in the east, west and south. The Nepal-India border is open and easy to cross. Although the frontier with China is more or less open, it straddles rugged mountain terrain. It is impossible to build border posts along the border with either country. Therefore, the geographical position of Nepal has been psychologically threatening to both neighbors. "China appears very sensitive towards activities against her in neighboring countries, including Nepal. China's security concern is indicated from [the visits of its] defense minister, senior army officials and home ministry officials from time to time," says Hiranya Lal Shrestha, a foreign relations expert in his article "Nepal-India Relations: Security Issue" published in Policy Study Series by the Institute of Foreign Affairs (November 2000). "At the same time, we cannot overlook the weaknesses of a landlocked state. Indian security perception regards the Himalayas as its sphere of influence. Since 14.9 percent of Nepal's territory lies to the north of the Himalayas, we may have to be divided into two spheres of influence if the northern neighbour also puts forward similar logic concerning its security perception. Nepal, in brief, does not want to remain under anyone's sphere of influence," says Shrestha. Be it the British Raj or independent India, Chinese influence in Nepal has always been a matter of concern to leaders of the south neighbor. In the book, "Life of Brian Houghton Hodgson, the British Resident at the Court of Nepal", William Wilson Hunter mentions how the British government was worried about Nepal's relations with China in 18th century. "But my situation by no means so agreeable as it might be if these barbarians did but know their own good. Instead of which they are insolent and hostile and play off on us, as far as they can dare, the Chinese etiquette and foreign polity. The Celestial Emperor is their idol, and, by the way, whilst I write, the  [Nepalese] sovereign himself is passing by the Residency in all royal pomp to go three miles in order to receive a letter which has just reached Nepal from Pekin. There they go! Fifty chiefs on horseback, royalty and royalty's advisors and on eight elephants and three thousand troops before and behind the cavalcade! They have reached the spot. The Emperor's letter, enclosed in a cylinder covered with brocade, hangs round the neck of a chief; who mounted on a spare elephant, is placed at the head of the cavalcade, and the cortege," writes Hodgson in a letter. This reflected how assertive and powerful the Chinese were in the internal dimensions of Nepalese politics in the 18th century. After independence, Indian leaders have been equally concerned about security issues, considering Nepal and Tibet to be the soft underbelly of their own country's security. "This is altogether more inexplicable when one examines the rapidity with which Nehru reacted to events in Nepal in the mid-fifties, forcefully intervening there to restore the Nepalese monarchy. Nepal and Tibet were both Himalayan kingdoms, both were of vital strategic importance to India, and they were both afflicted, almost simultaneously, whether externally or internally, and yet India and its political leadership reacted differently," writes Indian Foreign Minister Jaswant Singh in his book "Defending India". Referring to India's security, Indian Prime Minister Jawahar Lal Nehru once observed: "Now our interest in the internal conditions of Nepal became still more acute and personal, if I may say so, because of the developments in China and Tibet, to be frank. And regardless, of our feelings about Nepal, we were interested in our country's border. We have had from immemorial time a magnificent frontier, that is to say, the Himalayas are concerned, and they lie on the other side of Nepal. Therefore, the principal barrier to India lies on the other side of Nepal. Therefore, the principal barrier to India lies on the other side of Nepal and we are not going to tolerate any person coming over that barrier. Therefore, much as we appreciate the independence of Nepal, we cannot risk our own security by anything going wrong in Nepal." For his part, Li Peng, the chairman of China's National People's Congress, openly expressed China's security concerns in Nepal during the visit of Sher Bahadur Deuba in 1998 as a former prime minister. South Asia has three nuclear powers, India, China and Pakistan. Two powers, China and India, are competing for the status of regional power. Any form of direct confrontation between China and India in the south of the Himalayas will have far-reaching consequences.

### SOP Scenario

#### Nomination solves SOP

Richard O. Lempert 16, was a nonresident senior fellow with Governance Studies at the Brookings Institution, "Not replacing Scalia: Game theory in the real world", 2-15-2016, Brookings Institution, http://www.brookings.edu/blogs/fixgov/posts/2016/02/15-scalia-supreme-court-nominee-game-theory-lempert, DOA: 2-18-2016, y2k

President Obama's first move could have been more adroit. He appended to his announcement of Scalia’s death, and the praise he included, the pointed comment that he expected to be choosing Scalia’s successor. Surely he could have waited a day and made a separate announcement. But if Obama may have been somewhat gauche, the Republican first move was over the top, calling to mind the slap in the face that initiates a duel. Almost immediately following Scalia’s death, Republicans, led by Senate Majority Leader Mitch McConnell and Senate Judiciary Chair, Chuck Grassley, sought to challenge President Obama’s right to fill the Scalia vacancy, going on to suggest that, should he seek to fill the vacancy, any nomination he sent to the Senate would be dead on arrival. The implications of this position are as unsettling as they are profound. The McConnell-Grassley reaction implies that when a President is in his lame duck year, he is no longer authorized to exercise all the powers of the office. This implication is a repudiation of the Constitutional separation of powers and the Constitution’s definition of a Presidential term.

What is most puzzling about the McConnell-Grassley response is that it was unnecessary. Republicans know how to slow-walk judicial nominations. Some of Obama’s judicial nominations have lingered in committee, or were delayed by filibusters, for a year or more before being put to a vote, and few would be surprised if no additional Federal Circuit Court nominees are confirmed before Obama’s term expires. It is harder to bottle up Supreme Court nominees, and Supreme Court nominations tend to be acted on swiftly, usually taking less than two to three months from nomination to decision. Still the Judiciary Committee could have taken its own sweet time holding hearings on a candidate, and then it could have refused to report out an initial candidate or have voted out a nominee knowing that he or she would first face a filibuster and then be rejected by the Republican majority. This scenario could be repeated with a second nominee if necessary.

The political motivation for a slow-walk rejection would have been the same unwillingness to allow Obama to sway the Court that motivated the Republican leadership’s sight unseen-rejection of any Obama nomination. But the difference is crucial. The mechanism for rejection would have been the Senate performing its constitutional role in the judicial appointment process. Although the suspicion that the Senate’s motives were purely political would have been entirely justified, important appearances would have been maintained.

The Republican response may not be inconsequential. While it most likely foretells the results of any Obama effort to replace Scalia, it changes the space in which the nomination game will be played. In the classic game space, one in which Grassley would have promised to give any nominee a full and fair hearing, Obama would most likely have nominated the person he most wanted to see on the bench, and his nominee would almost certainly have not survived the Senate. Now things are more interesting, and there is an array of Obama moves and Republican countermoves to contemplate. Two Obama moves don’t merit discussion. One is for Obama to listen to McConnell, recognize that no nominee will be approved and submit no name. The second is to nominate a person so conservative that the Republican Senate will confirm. These will not happen.

Among the more realistic possibilities, one is to pretend nothing has changed. Obama might still choose to nominate the person he would most like to see on the Court. If there is such a thing as ethical politics, this should be his choice, for a President should try to seat on the Court the person he thinks best suited for the position. But to do this in the face of the McConnell/Grassley remarks is to invite what is known in the Prisoner’s Dilemma game as “the sucker’s payoff.” This is the payoff when one player cooperates (nominates a well-qualified candidate) and the other player defects (rejects regardless of qualifications). With this choice, Obama not only knows already that his nominee is doomed, but it is also likely that regardless of which party prevails in the presidential race, the winner will replace Obama’s choice with his or her own.

A second approach is the “in your face” option. Obama, feeling he has nothing to lose because no one he nominates will be confirmed, could choose an outspoken liberal as his nominee. The left wing of the Democratic Party would most likely celebrate such a choice, and it would bolster Obama’s image among a segment of the party who feel that he has not been aggressive enough in negotiating with Republicans and defending liberal values. Republicans would, of course, vote down such a candidate and face the least political cost for doing so. Obama does not have Donald Trump’s ego. There is little reason to expect him to take this route.

A third approach, more consistent with Obama’s approach to politics, is the nomination of a responsible moderate, someone not as consistently liberal as some in the Democratic Party (and perhaps Obama himself) might like, but also a person not nearly as conservative as the Scalia replacement a Republican president would choose. Obama might, for example, nominate someone like Merrick Garland, Chief Judge of the D.C. Circuit, a Clinton appointee, and a person often cited as an intellectual leader of the federal bench. Garland is widely respected by lawyers, regardless of party, and his decisions are rooted more in rigorous legal analysis than ideological predilections. Both liberals and conservatives will find decisions of his they like, and decisions they don’t like. Republicans would have a hard time justifying rejection of a judge who in many ways is a model of what a nation that believes in the rule of law seeks. Another option would be to nominate a moderate Republican judge, like Debra Livingston of the Second Circuit. Judge Livingston, a former prosecutor and law professor, was nominated to the Second Circuit by President Bush and was confirmed by a 97-0 vote. How could the Republicans refuse to consider and approve a Judge whom they all supported not too many years ago, and how could they explain their refusal to the nation’s women?

If Obama chooses to nominate a moderate, there is a chance that despite the Republican leadership’s expression of intransigence, the nominee would be confirmed. The situation is akin to what is in game theory is called a “minimax” solution; each side minimizes the maximum loss it will suffer. Democrats see the appointment of a Justice who appears more of a centrist than they would like, but avoid the possibility of a Scalia-like replacement should a Republican win in November. Republicans see the same thing in reverse. They would prefer a much more conservative nominee, but they avoid the risk of a Justice who might side with the Court’s liberals regardless of the issue or even pull them to the left. The business community in particular might prefer the certain appointment of a Justice who could be counted on to consider and understand their side of the story before deciding rather than risk the appointment of a Justice who shared Senator Sanders’ vision of rapacious corporations or who satisfied Clinton’s need to court the Democratic left in preparation for a second term election.

## Warming Impacts

### 2NC/1NR Impact Calc

#### Warming outweighs and turns all of their impact---You can’t negotiate with climate and intervening actors check their impacts---the direction of offense only goes neg

Townsend & Harris 4, “Now the Pentagon tells Bush: climate change will destroy us,” 2-22-4, <http://www.theguardian.com/environment/2004/feb/22/usnews.theobserver>, DOA: 1-13-15, y2k

Climate change over the next 20 years could result in a global catastrophe costing millions of lives in wars and natural disasters. A secret report, suppressed by US defence chiefs and obtained by The Observer, warns that major European cities will be sunk beneath rising seas as Britain is plunged into a 'Siberian' climate by 2020. Nuclear conflict, mega-droughts, famine and widespread rioting will erupt across the world. The document predicts that abrupt climate change could bring the planet to the edge of anarchy as countries develop a nuclear threat to defend and secure dwindling food, water and energy supplies. The threat to global stability vastly eclipses that of terrorism, say the few experts privy to its contents. 'Disruption and conflict will be endemic features of life,' concludes the Pentagon analysis. 'Once again, warfare would define human life.' The findings will prove humiliating to the Bush administration, which has repeatedly denied that climate change even exists. Experts said that they will also make unsettling reading for a President who has insisted national defence is a priority. The report was commissioned by influential Pentagon defence adviser Andrew Marshall, who has held considerable sway on US military thinking over the past three decades. He was the man behind a sweeping recent review aimed at transforming the American military under Defence Secretary Donald Rumsfeld. Climate change 'should be elevated beyond a scientific debate to a US national security concern', say the authors, Peter Schwartz, CIA consultant and former head of planning at Royal Dutch/Shell Group, and Doug Randall of the California-based Global Business Network. An imminent scenario of catastrophic climate change is 'plausible and would challenge United States national security in ways that should be considered immediately', they conclude. As early as next year widespread flooding by a rise in sea levels will create major upheaval for millions. Last week the Bush administration came under heavy fire from a large body of respected scientists who claimed that it cherry-picked science to suit its policy agenda and suppressed studies that it did not like. Jeremy Symons, a former whistleblower at the Environmental Protection Agency (EPA), said that suppression of the report for four months was a further example of the White House trying to bury the threat of climate change. Senior climatologists, however, believe that their verdicts could prove the catalyst in forcing Bush to accept climate change as a real and happening phenomenon. They also hope it will convince the United States to sign up to global treaties to reduce the rate of climatic change. A group of eminent UK scientists recently visited the White House to voice their fears over global warming, part of an intensifying drive to get the US to treat the issue seriously. Sources have told The Observer that American officials appeared extremely sensitive about the issue when faced with complaints that America's public stance appeared increasingly out of touch. One even alleged that the White House had written to complain about some of the comments attributed to Professor Sir David King, Tony Blair's chief scientific adviser, after he branded the President's position on the issue as indefensible. Among those scientists present at the White House talks were Professor John Schellnhuber, former chief environmental adviser to the German government and head of the UK's leading group of climate scientists at the Tyndall Centre for Climate Change Research. He said that the Pentagon's internal fears should prove the 'tipping point' in persuading Bush to accept climatic change. Sir John Houghton, former chief executive of the Meteorological Office - and the first senior figure to liken the threat of climate change to that of terrorism - said: 'If the Pentagon is sending out that sort of message, then this is an important document indeed.' Bob Watson, chief scientist for the World Bank and former chair of the Intergovernmental Panel on Climate Change, added that the Pentagon's dire warnings could no longer be ignored. 'Can Bush ignore the Pentagon? It's going be hard to blow off this sort of document. Its hugely embarrassing. After all, Bush's single highest priority is national defence. The Pentagon is no wacko, liberal group, generally speaking it is conservative. If climate change is a threat to national security and the economy, then he has to act. There are two groups the Bush Administration tend to listen to, the oil lobby and the Pentagon,' added Watson. 'You've got a President who says global warming is a hoax, and across the Potomac river you've got a Pentagon preparing for climate wars. It's pretty scary when Bush starts to ignore his own government on this issue,' said Rob Gueterbock of Greenpeace. Already, according to Randall and Schwartz, the planet is carrying a higher population than it can sustain. By 2020 'catastrophic' shortages of water and energy supply will become increasingly harder to overcome, plunging the planet into war. They warn that 8,200 years ago climatic conditions brought widespread crop failure, famine, disease and mass migration of populations that could soon be repeated. Randall told The Observer that the potential ramifications of rapid climate change would create global chaos. 'This is depressing stuff,' he said. 'It is a national security threat that is unique because there is no enemy to point your guns at and we have no control over the threat.'

AND- It’s the only non-recoverable impact---irreversible nature of warming means vote neg on precautionary principle

David Roberts 13, citing the World Bank Review’s compilation of climate studies, “If you aren’t alarmed about climate, you aren’t paying attention” http://grist.org/climate-energy/climate-alarmism-the-idea-is-surreal/

We know we’ve raised global average temperatures around 0.8 degrees C so far. We know that 2 degrees C is where most scientists predict catastrophic and irreversible impacts. And we know that we are currently on a trajectory that will push temperatures up 4 degrees or more by the end of the century. What would 4 degrees look like? A recent World Bank review of the science reminds us. First, it’ll get hot: Projections for a 4°C world show a dramatic increase in the intensity and frequency of high-temperature extremes. Recent extreme heat waves such as in Russia in 2010 are likely to become the new normal summer in a 4°C world. Tropical South America, central Africa, and all tropical islands in the Pacific are likely to regularly experience heat waves of unprecedented magnitude and duration. In this new high-temperature climate regime, the coolest months are likely to be substantially warmer than the warmest months at the end of the 20th century. In regions such as the Mediterranean, North Africa, the Middle East, and the Tibetan plateau, almost all summer months are likely to be warmer than the most extreme heat waves presently experienced. For example, the warmest July in the Mediterranean region could be 9°C warmer than today’s warmest July. Extreme heat waves in recent years have had severe impacts, causing heat-related deaths, forest fires, and harvest losses. The impacts of the extreme heat waves projected for a 4°C world have not been evaluated, but they could be expected to vastly exceed the consequences experienced to date and potentially exceed the adaptive capacities of many societies and natural systems. [my emphasis] Warming to 4 degrees would also lead to “an increase of about 150 percent in acidity of the ocean,” leading to levels of acidity “unparalleled in Earth’s history.” That’s bad news for, say, coral reefs: The combination of thermally induced bleaching events, ocean acidification, and sea-level rise threatens large fractions of coral reefs even at 1.5°C global warming. The regional extinction of entire coral reef ecosystems, which could occur well before 4°C is reached, would have profound consequences for their dependent species and for the people who depend on them for food, income, tourism, and shoreline protection. It will also “likely lead to a sea-level rise of 0.5 to 1 meter, and possibly more, by 2100, with several meters more to be realized in the coming centuries.” That rise won’t be spread evenly, even within regions and countries — regions close to the equator will see even higher seas. There are also indications that it would “significantly exacerbate existing water scarcity in many regions, particularly northern and eastern Africa, the Middle East, and South Asia, while additional countries in Africa would be newly confronted with water scarcity on a national scale due to population growth.” Also, more extreme weather events: Ecosystems will be affected by more frequent extreme weather events, such as forest loss due to droughts and wildfire exacerbated by land use and agricultural expansion. In Amazonia, forest fires could as much as double by 2050 with warming of approximately 1.5°C to 2°C above preindustrial levels. Changes would be expected to be even more severe in a 4°C world. Also loss of biodiversity and ecosystem services: In a 4°C world, climate change seems likely to become the dominant driver of ecosystem shifts, surpassing habitat destruction as the greatest threat to biodiversity. Recent research suggests that large-scale loss of biodiversity is likely to occur in a 4°C world, with climate change and high CO2 concentration driving a transition of the Earth’s ecosystems into a state unknown in human experience. Ecosystem damage would be expected to dramatically reduce the provision of ecosystem services on which society depends (for example, fisheries and protection of coastline afforded by coral reefs and mangroves.) New research also indicates a “rapidly rising risk of crop yield reductions as the world warms.” So food will be tough. All this will add up to “large-scale displacement of populations and have adverse consequences for human security and economic and trade systems.” Given the uncertainties and long-tail risks involved, “there is no certainty that adaptation to a 4°C world is possible.” There’s a small but non-trivial chance of advanced civilization breaking down entirely. Now ponder the fact that some scenarios show us going up to 6 degrees by the end of the century, a level of devastation we have not studied and barely know how to conceive. Ponder the fact that somewhere along the line, though we don’t know exactly where, enough self-reinforcing feedback loops will be running to make climate change unstoppable and irreversible for centuries to come. That would mean handing our grandchildren and their grandchildren not only a burned, chaotic, denuded world, but a world that is inexorably more inhospitable with every passing decade.

#### Timeframe isn’t relevant---it doesn’t make sense to save 1000 people dying in a few days when humanity definitively will die off in the future.

### 2NC Yes Anthropogenic

#### Warming is real and anthropogenic – most recent data

Sato, et al 13 [Makiko Sato is affiliated with the NASA Goddard Institute for Space Studies and the Center for Climate Systems Research at Columbia University. AND Hansen, James E. Hansen heads the NASA Goddard Institute for Space Studies in New York City. He is also an adjunct professor in the Department of Earth and Environmental Sciences at Columbia University. Hansen is best known for his research in the field of climatology. In 1988, Hansen’s testimony before the US Senate was featured on the front page of the New York Times and helped raise broad awareness of global warming. Hansen’s work has inspired scientists and activists around the world to fight for climate change solutions. In recent years, Hansen has become an activist for action to mitigate the effects of climate change, which on several occasions has led to his arrest. In 2009 his book, Storms of My Grandchildren: The Truth About the Coming Climate Catastrophe and Our Last Chance to Save Humanity was published.Global Temperature Update Through 2012 15 January 2013 J. Hansen, M. Sato, R. Ruedyhttp://www.columbia.edu/~jeh1/mailings/2013/20130115\_Temperature2012.pdf]

Summary. Global surface temperature in 2012 was +0.56°C (1°F) warmer than the 1951-1980 base period average, despite much of the year being affected by a strong La Nina. Global temperature thus continues at a high level that is sufficient to cause a substantial increase in the frequency of extreme warm anomalies. The 5-year mean global temperature has been flat for a decade, which we interpret as a combination of natural variability and a slowdown in the growth rate of the net climate forcing. An update through 2012 of our global analysis1 (Fig. 1) reveals 2012 as having practically the same temperature as 2011, significantly lower than the maximum reached in 2010. These short-term global fluctuations are associated principally with natural oscillations of tropical Pacific sea surface temperatures summarized in the Nino index in the lower part of the figure. 2012 is nominally the 9th warmest year, but it is indistinguishable in rank with several other years, as shown by the error estimate for comparing nearby years. Note that the 10 warmest years in the record all occurred since 1998. The long-term warming trend, including continual warming since the mid-1970s, has been conclusively associated with the predominant global climate forcing, human-made greenhouse gases2, which began to grow substantially early in the 20th century. The approximate stand-still of global temperature during 1940-1975 is generally attributed to an approximate balance of aerosol cooling and greenhouse gas warming during a period of rapid growth of fossil fuel use with little control on particulate air pollution, but satisfactory quantitative interpretation has been impossible because of the absence of adequate aerosol measurements3,4. Below we discuss the contributions to temperature change in the past decade from stochastic (unforced) climate variability and from climate forcings. Fig. 1. Global surface temperature anomalies relative to 1951-1980. The Nino index is based on the detrended temperature in the Nino 3.4 area in the eastern tropical Pacific5. Green triangles mark the times of volcanic eruptions that produced an extensive stratospheric aerosol layer. Blue vertical bars are estimates of the 95% confidence interval for comparisons of nearby years. 2 Fig. 2. Annual and seasonal temperature anomalies relative to 1951-1980 base period. Dec-Jan-Feb map employs December 2011 data, while the annual map is for calendar year 2012. The most extreme temperature anomalies in 2012, exceeding 2.5°C (4.5°F) on annual mean, occurred in the Arctic and in the middle of North America (Fig. 2). The large springtime heat anomaly in North America dried out the soil in a large part of the United States, thus leaving little soil moisture to provide evaporative cooling in the summer. The summer temperature anomaly was smaller than in the prior two seasons, but summer temperature variability is smaller than in the other seasons, so the 2012 summer anomaly was also unusually large as described in NOAA reports6. 3 Fig. 3. Frequency of occurrence of local June-July-August temperature anomalies (relative to 1951-1980 mean) for Northern Hemisphere land in units of local standard deviation (horizontal axis). Temperature anomalies in 1951-1980 match closely the normal distribution (green curve), which is used to define cold (blue), typical (white) and hot (red) seasons, each with probability 33.3%. Lower graphs use only a subset of stations (1886 of 6147) that were present throughout recent decades as well as the base period. The New Climate Dice. The high current global temperature is sufficient to have a noticeable effect on the frequency of occurrence of extreme warm anomalies. The left-most "bell curve" in Fig. 3 is the frequency distribution of summer-average temperature anomalies during the base period 1951-1980, in units of the local standard deviation1 of seasonal-average temperature. The observational data show that the frequency of unusually warm anomalies has been increasing decade by decade over the past three decades. Perhaps the most important change is the emergence of extremely hot outliers, defined as anomalies exceeding 3 standard deviations. Such extreme summer heat anomalies occurred in 2010 over a large region in Eastern Europe including Moscow, in 2011 in Oklahoma, Texas and Northern Mexico, and in 2012 in the United States in part of the central Rockies and Great Plains. The location of these extreme anomalies is dependent upon variable meteorological patterns, but the decade-by-decade movement of the bell curve to the right, and the emergence of an increased number of extreme warm anomalies, is an expression of increasing global warming. Some seasons continue to be unusually cool even by the standard of average 1951-1980 climate, but the "climate dice" are now sufficiently loaded that an observant person should notice that unusually warm seasons are occurring much more frequently than they did a few decades earlier. 1 The standard deviation is a measure of typical variability about the average. About two-thirds of the cases fall within 1 standard deviation of the average and about 95 percent fall within 2 standard deviations. 4 Fig. 4. Top: Solar irradiance from composite of several satellite-measured time series. Data through 2 February 2011 is from Frohlich and Lean (1998 and Physikalisch Meteorologisches Observatorium Davos, World Radiation Center). Update is from University of Colorado Solar Radiation & Climate Experiment normalized to match means over the final 12 months of the Frohlich and Lean data. Sunspot data from http://sidc.oma.be/sunspot-data/ Global Warming Standstill. The 5-year running mean of global temperature has been flat for the past decade. It should be noted that the "standstill" temperature is at a much higher level than existed at any year in the prior decade except for the single year 1998, which had the strongest El Nino of the century. However, the standstill has led to a widespread assertion that "global warming has stopped". Examination of this matter requires consideration of the principal climate forcing mechanisms that can drive climate change and the effects of stochastic (unforced) climate variability. The climate forcing most often cited as a likely natural cause of global temperature change is solar variability. The sun's irradiance began to be measured precisely from satellites in the late 1970s, thus quantifying well the variation of solar energy reaching Earth (Fig. 4). The irradiance change associated with the 10-13 year sunspot cycle is about 0.1%. Given the ~240 W/m2 of solar energy absorbed by Earth, this solar cycle variation is about 1/4 W/m2 averaged over the planet. Although it is too early to know whether the maximum of the present solar cycle has been reached, the recent prolonged solar minimum assures that there is a recent downward trend in decadal solar irradiance, which may be a decrease of the order of 0.1 W/m2. Although several hypotheses have been made for how the solar irradiance variations could be magnified by indirect effects, no convincing confirmation of indirect forcings has been found except for a very small amplifying effect via changes of stratospheric ozone. 2 A climate forcing is an imposed perturbation of the planet's energy balance that would tend to alter global temperature. 5 Fig. 5. Update7 of 5-year mean of the growth rate of climate forcing by well-mixed greenhouse gases; ozone and stratospheric water vapor, neither well-mixed nor well-measured, are not included. The largest climate forcing is caused by increasing greenhouse gases, principally CO2 (Fig. 5). The annual increment in the greenhouse gas forcing (Fig. 5) has declined from about 0.05 W/m2 in the 1980s to about 0.035 W/m2 in recent years8. The decline is primarily a consequence of successful phase-out of ozone-depleting gases and reduction of the growth rate of methane. Also, the airborne fraction of fossil fuel CO2 emissions has declined and the forcing per CO2 increment declines slowly as CO2 increases due to partial saturation of absorption bands, so the CO2 forcing growth rate has been steady despite the rapid growth of fossil fuel emissions. The second largest human-made forcing is probably atmospheric aerosols, although the aerosol forcing is extremely uncertain3,4. Our comparison of the various forcings (Fig. 6a) shows the aerosol forcing estimated by Hansen et al.9 up to 1990; for later dates it assumes that the aerosol forcing increment is half as large as the greenhouse gas forcing but opposite in sign. This aerosol forcing can be described as an educated guess. If the aerosol forcing has thusly become more negative in the past decade, the sum of the known climate forcings has little net change in the past few decades (Fig. 6b). The increased (negative) aerosol forcing is plausible, given the increased global use of coal during this period, but the indicated quantification is arbitrary, given the absence of aerosol measurements of the needed accuracy. Even if the aerosol forcing has remained unchanged in the past decade, the dashed line in Fig. 6b shows that the total climate forcing increased at a slower rate in the past decade than in the prior three decades. The slight growth in the past decade is due to a combination of factors: solar irradiance decline, slight increase of stratospheric aerosols, and the lower growth rate of greenhouse gas forcing compared with the 1970s and 1980s. A slower growth rate of the net climate forcing may have contributed to the standstill of global temperature in the past decade, but it cannot explain the standstill, because it is known that the planet has been out of energy balance, more energy coming in from the sun than energy being radiated to space.10 The planetary energy imbalance is due largely to the increase of climate forcings in prior decades and the great thermal inertia of the ocean. The more important factor in the standstill is probably unforced dynamical variability, essentially climatic "noise". 6 Fig. 6. Estimated climate forcings, with uncertainties that vary from small for well-mixed greenhouse gases to large for unmeasured tropsopheric aerosols. Forcings through 2003 (vertical line) are the same as used by Hansen et al. (2007), except the tropospheric aerosol forcing after 1990 is approximated as -0.5 times the GHG forcing. Aerosol forcing includes all aerosol effects, including indirect effects on clouds and snow albedo. GHGs include O3 and stratospheric H2O, in addition to well-mixed GHGs. Indeed, the current stand-still of the 5-year running mean global temperature may be largely a consequence of the fact that the first half of the past 10 years had predominately El Nino conditions, while the second half had predominately La Nina conditions (Nino index in Fig. 1). Comparing the global temperature at the time of the most recent three La Ninas (1999-2000, 2008, and 2011-2012), it is apparent that global temperature has continued to rise between recent years of comparable tropical temperature, indeed, at a rate of warming similar to that of the previous three decades. We conclude that background global warming is continuing, consistent with the known planetary energy imbalance, even though it is likely that the slowdown in climate forcing growth rate contributed to the recent apparent standstill in global temperature. Climate Change Expectations. It is relevant to comment on expectations about near-term climate change, especially because it seems likely that solar irradiance observations are in the process of confirming that solar irradiance has weakened modestly over the latest solar cycle. If solar irradiance were the dominant drive of climate change that most global warming contrarians believe, then a global cooling trend might be expected. On the contrary, however, the continuing planetary energy imbalance and the rapid increase of CO2 emissions from fossil fuel use assure that global warming will continue on decadal time scales. Moreover, our interpretation of the larger role of unforced variability in temperature change of the past decade, suggests that global temperature will rise significantly in the next few years as the tropics moves inevitably into the next El Nino phase.

### 2NC Yes Extinction

#### Our scenario is uniquely existential – warming is a threat multiplier

Ferris, 13 [The Big Thaw, Elizabeth Ferris Co-Director, Brookings-LSE Project on Internal Displacement, 1/17, http://www.brookings.edu/research/papers/2013/01/the-big-thaw

Global warming is occurring at a faster pace than predicted by scientists. Temperatures are rising, icecaps and glaciers are melting, and extreme weather events are becoming both more frequent and more intense. Last fall, the National Snow and Ice Data Center documented a record low of the level of Arctic sea ice – a figure 49 percent lower than the 1979-2000 average. If these trends continue, the results will be far-reaching for life on this planet. But if the warming accelerates dramatically and if polar ice melts even faster, the results could be catastrophic. This could occur if the Greenland ice sheet or the West Antarctica Ice Sheet (WAIS) collapses, triggering a significant rise in sea levels throughout the world with particularly devastating impacts on populations living in low-lying coastal areas. Although the effects of climate change are likely to be long-term and the worst effects will probably neither be experienced in your presidency nor even in your lifetime, the future is inherently unpredictable. Climate change is already affecting communities around the world. It is likely to produce devastating consequences whether in the near or distant future. Taking bold steps now to address climate change offers an opportunity for you not only to leave a legacy that will impact future generations but also an opportunity to address current problems resulting from the effects of climate change. Recommendations: • Raise the priority of climate change on your foreign policy agenda, in particular by re-vitalizing negotiations over a post-Kyoto treaty. The Doha round of negotiations, which ended last month, was disappointing. Countries are further away today than they were a year ago on reducing emissions. U.S. leadership can reverse current trends of inadequate globalcommitment to reduce greenhouse gases. • Support measures that will enable communities and countries to adapt to the most egregious effects of climate change. On the international level this means supporting and leading the difficult discussions around climate finance and using U.S. aid to support government planning to respond to the effects of climate change, including financial assistance to encourage communities to stay where they are as well as to plan for the relocation of communities whose homes will no longer be habitable. • Support effective multilateral action to increase both mitigation and adaptation measures. Use your influence with the multilateral development banks to encourage more attention to disaster riskreduction measures in development planning. Work with international agencies and legal experts to devise an international legal regime for dealing with the expected increase in trans-border migration. It is easier to put a system in place before a crisis is at hand. • Strengthen domestic efforts to mitigate the effects of climate change by reducing carbon emissions and enhancing domestic capacity to prepare for, respond, and recover from sudden-onset natural disasters. Background: Since the first report of the Intergovernmental Panel on Climate Change (IPCC) in 1990, the projections about the impact of global warming have become direr. From projecting the widespread consequences of a global rise in temperature of 2 degrees Celsius by the end of the century, current projections are that the rise in temperature will double to 4 degrees Celsius. The seas are rising 60 percent faster than predicted by the IPCC. The Greenland ice sheet is shrinking twice as fast as estimated by the IPCC and is losing mass at about five times the rate it was in the early 1990s. If the Greenland ice sheet were to melt completely, global sea rise could reach seven meters. And the consequences of global warming go far beyond sea-level rise. For example, the National Oceanic and Atmospheric Administration warns that the conditions that led to the 2011 Texas drought are 20 times more likely to occur now than in the 1960s as a result of increases in greenhouse gas concentrations. Although climate change will have many negative effects in different parts of the world, including prolonged droughts, reduction in arable land, declining agricultural productivity, and increased flooding due to more extreme weather events, the impact of sea level rise perhaps best illustrates the potential dangers. Throughout the world, more people are living in coastal areas as the result of population growth, urbanization and government policies. Presently 10 percent of the world’s population — 600 million people — live in low-elevation coastal zones and the percentage is growing. Sixty-five percent of the world’s megacities (those over 5 million) are located in these coastal areas. A rise in sea level of even a meter would have major implications for coastal populations; if sea levels were to rise by several meters, the consequences would be catastrophic. Most obviously, sea level rise will submerge land, causing countries to lose physical territory. The areas expected to experience the largest land loss by 2030 are the Arctic Ocean coasts of Canada, Alaska, Siberia and Greenland as well as coastal areas of Pakistan, Sri Lanka, southeast Indonesia, and eastern Africa. In the United States, particularly vulnerable areas include the coastal areas of the east and west coasts and the Gulf of Mexico. Rising sea levels will affect economics, politics, community life and security. For example, the mega-deltas of Asia are the food baskets of the region, and the impact of a sea level rise on food security will be considerable. But perhaps the most significant impact of climate change in general and rising sea levels in particular will be the displacement of people. Migration is a complex process driven by a range of economic, social and political factors but it is becoming clear that environmental factors will increasingly influence migration. In Bangladesh, for example, moving to cities has become a common coping strategy in the face of flooding. One of the IPCC background studies posits that a 40-centimeter rise in sea levels will affect 100 million people. As hundreds of millions of people in Africa and Asia are at risk of flooding by 2060, it is likely that many will move to cities such as Dhaka and Lagos that are located in coastal flood plain areas. In other words, the trend is for people to migrate to areas of greater — not lesser — environmental vulnerability. At the same time, as the UK’s authoritative Foresight study concludes, those who are able to migrate may well be the lucky ones; those who are unable to move may be the most vulnerable. Large-scale migration has many consequences. If sea level rise renders small island states uninhabitable (which is likely to occur long before the islands are actually submerged by the seas), issues of sovereignty, legal status, and responsibility will present the world with huge challenges. Most climate change-induced or displacement will be internal, placing strain on infrastructure and pressure on governments to deliver services. Political instability, conflict poor governance exacerbate these problems. Climate change is a threat multiplier, often affecting those countries least able to respond appropriately. How will governments cope with the movement of large numbers of people from coasts toward inland areas? There is also a possibility that some, perhaps many, will seek to move to other countries because of the effects of climate change. The international legal system is unprepared to deal with trans-border movements triggered by environmental factors or disasters, since the displaced do not fall under the 1951 Refugee Convention (unless they leave because of political turmoil exacerbated by climate change.) Projecting possible massive displacement from climate change is complicated by the difficulty of comprehending the interrelationships between the different effects of climate change, for example, changes in fish stocks and coral reefs brought about by the acidification of the world’s oceans; changing patterns of disease; changing habitats for animals and plants; the intersection of deforestation and increasingly arid climates in some parts of the world. Delicate ecological balances are changing in ways that are as yet poorly understood. Similarly, there is much we do not know about the dynamic nature of the effects of climate change. For example, some scientists are reporting that the melting of Arctic ice itself is releasing more carbon into the atmosphere, increasing global warming which will in turn increase the rate of Arctic ice melt. Most scientists have observed that the climate is becoming warmer and that extreme weather events are becoming more frequent. While it is impossible to attribute any single weather event, such as Hurricane Sandy, to climate change, the global trends clearly demonstrate an increase in the frequency of extreme weather events. These trends are likely to intensify. The interaction between increasing extreme weather events and other effects of climate change – such as increased erosion, acidification of the seas, desertification, sea-level rise – is also likely to lead to large-scale movement of people. Conclusion: There are certainly obstacles and pitfalls to making climate change a centerpiece of your foreign policy. Perhaps the projections of scientists are too pessimistic and the effects of global warming will not be as serious as now thought. Perhaps you will be unable to marshal the necessary political support to enact necessary legislation. Perhaps other governments will fail to rally to your leadership and perhaps the negotiations over climate change mitigation and adaptation will widen, not narrow the North- South divide. It is certainly understandable that you would want to put aside these longer-term challenges and focus on more immediate economic issues. But a climate catastrophe could be lurking around the corner. Unless urgent action is taken now, the effects of climate change on life on this planet and on life in the United States will increase. Climate change is a domestic, foreign policy, security, development, human rights, and intergenerational justice issue. Preparing better for climate change disasters at home and abroad is a good short-term prophylactic. But making serious and sustained efforts to reduce global warming can solidify America’s present leadership in the world. It can lay the foundation for the country’s sustainable future development. It can address the causes of future humanitarian crises and alleviate future human suffering. It can be a legacy issue for the Obama administration that will impact the world for generations.

#### Emissions cause rapid extinction from ocean acidification

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(Joseph J., “Science: Ocean Acidifying so fast that it threatens humanity’s ability to feed itself”, 3/2/12; http://earthlawcenter.org/news/headline/science-ocean-acidifying-so-fast-it-threatens-humanitys-ability-to-feed-itself/)

The world’s oceans may be turning acidic faster today from human carbon emissions than they did during four major extinctions in the last 300 million years, when natural pulses of carbon sent global temperatures soaring, says a new study in Science. The study is the first of its kind to survey the geologic record for evidence of ocean acidification over this vast time period.¶ “What we’re doing today really stands out,” said lead author Bärbel Hönisch, a paleoceanographer at Columbia University’s Lamont-Doherty Earth Observatory. “We know that life during past ocean acidification events was not wiped out—new species evolved to replace those that died off. But if industrial carbon emissions continue at the current pace, we may lose organisms we care about—coral reefs, oysters, salmon.”¶ James Zachos, a paleoceanographer at University of California, Santa Cruz, with a core of sediment from some 56 million years ago, when the oceans underwent acidification that could be an analog to ocean changes today.¶ That’s the news release from a major 21-author Science paper, “The Geological Record of Ocean Acidification” (subs. req’d).¶ We knew from a 2010 Nature Geoscience study that the oceans are now acidifying 10 times faster today than 55 million years ago when a mass extinction of marine species occurred. But this study looked back over 300 million and found that “the unprecedented rapidity of CO2 release currently taking place” has put marine life at risk in a frighteningly unique way:¶ … the current rate of (mainly fossil fuel) CO2 release stands out as capable of driving a combination and magnitude of ocean geochemical changes potentially unparalleled in at least the last ~300 My of Earth history, raising the possibility that we are entering an unknown territory of marine ecosystem change.¶ That is to say, it’s not just that acidifying oceans spell marine biological meltdown “by end of century” as a 2010 Geological Society study put it. We are also warming the ocean and decreasing dissolved oxygen concentration. That is a recipe for mass extinction. A 2009 Nature Geoscience study found that ocean dead zones “devoid of fish and seafood” are poised to expand and “remain for thousands of years.“¶ And remember, we just learned from a 2012 new Nature Climate Change study that carbon dioxide is “driving fish crazy” and threatening their survival.¶ Here’s more on the new study:¶ The oceans act like a sponge to draw down excess carbon dioxide from the air; the gas reacts with seawater to form carbonic acid, which over time is neutralized by fossil carbonate shells on the seafloor. But if CO2 goes into the oceans too quickly, it can deplete the carbonate ions that corals, mollusks and some plankton need for reef and shell-building.¶ That is what is happening now. In a review of hundreds of paleoceanographic studies, a team of researchers from five countries found evidence for only one period in the last 300 million years when the oceans changed even remotely as fast as today: the Paleocene-Eocene Thermal Maximum, or PETM, some 56 million years ago. In the early 1990s, scientists extracting sediments from the seafloor off Antarctica found a layer of mud from this period wedged between thick deposits of white plankton fossils. In a span of about 5,000 years, they estimated, a mysterious surge of carbon doubled atmospheric concentrations, pushed average global temperatures up by about 6 degrees C, and dramatically changed the ecological landscape.¶ The result: carbonate plankton shells littering the seafloor dissolved, leaving the brown layer of mud. As many as half of all species of benthic foraminifers, a group of single-celled organisms that live at the ocean bottom, went extinct, suggesting that organisms higher in the food chain may have also disappeared, said study co-author Ellen Thomas, a paleoceanographer at Yale University who was on that pivotal Antarctic cruise. “It’s really unusual that you lose more than 5 to 10 percent of species over less than 20,000 years,” she said. “It’s usually on the order of a few percent over a million years.” During this time, scientists estimate, ocean pH—a measure of acidity–may have fallen as much as 0.45 units. (As pH falls, acidity rises.)¶ In the last hundred years, atmospheric CO2 has risen about 30 percent, to 393 parts per million, and ocean pH has fallen by 0.1 unit, to 8.1–an acidification rate at least 10 times faster than 56 million years ago, says Hönisch. The Intergovernmental Panel on Climate Change predicts that pH may fall another 0.3 units by the end of the century,to 7.8, raising the possibility that we may soon see ocean changes similar to those observed during the PETM.¶ More catastrophic events have shaken earth before, but perhaps not as quickly. The study finds two other times of potential ocean acidification: the extinctions triggered by massive volcanism at the end of the Permian and Triassic eras, about 252 million and 201 million years ago respectively. But the authors caution that the timing and chemical changes of these events is less certain. Because most ocean sediments older than 180 million years have been recycled back into the deep earth, scientists have fewer records to work with.¶ During the end of the Permian, about 252 million years ago, massive volcanic eruptions in present-day Russia led to a rise in atmospheric carbon, and the extinction of 96 percent of marine life. Scientists have found evidence for ocean dead zones and the survival of organisms able to withstand carbonate-poor seawater and high blood-carbon levels, but so far they have been unable to reconstruct changes in ocean pH or carbonate.¶ At the end of the Triassic, about 201 million years ago, a second burst of mass volcanism doubled atmospheric carbon. Coral reefs collapsed and many sea creatures vanished. Noting that tropical species fared the worst, some scientists question if global warming rather than ocean acidification was the main killer at this time.¶ The effects of ocean acidification today are overshadowed for now by other problems, ranging from sewage pollution and hotter summer temperatures that threaten corals with disease and bleaching. However, scientists trying to isolate the effects of acidic water in the lab have shown that lower pH levels can harm a range of marine life, from reef and shell-building organisms to the tiny snails favored by salmon. In a recent study, scientists from Stony Brook University found that the larvae of bay scallops and hard clams grow best at pre-industrial pH levels, while their shells corrode at the levels projected for 2100. Off the U.S. Pacific Northwest, the death of oyster larvae has recently been linked to the upwelling of acidic water there.¶ In parts of the ocean acidified by underwater volcanoes venting carbon dioxide, scientists have seen alarming signs of what the oceans could be like by 2100. In a 2011 study of coral reefs off Papua New Guinea, scientists writing in the journal Nature Climate Change found that when pH dropped to 7.8, reef diversity declined by as much as 40 percent. Other studies have found that clownfish larvae raised in the lab lose their ability to sniff out predators and find their way home when pH drops below 7.8.¶ “It’s not a problem that can be quickly reversed,” said Christopher Langdon, a biological oceanographer at the University of Miami who co-authored the study on Papua New Guinea reefs. “Once a species goes extinct it’s gone forever. We’re playing a very dangerous game.”

### 2NC AT: Negative Feedback

#### Most recent, comprehensive data prove a low threshold for the runaway greenhouse

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(Colin, et al., “Low simulated radiation limit for runaway greenhouse climates,” Nature Geoscience 6, 661–667, doi:10.1038/ngeo1892)

Here, we present the most complete study of the runaway greenhouse for 25 years, across the full range of temperatures, using modern input spectroscopic data and a line-by-line treatment of the solar and thermal radiation (see the Methods). We limit ourselves to clear-sky (cloud-free) calculations, which embody the first-order physics of the problem. Clouds both reflect solar radiation (making the runaway less likely) and enhance the greenhouse (making it more likely). Omitting them yields hard upper bounds on both solar absorption and thermal emission. This is a robust place to begin a re-evaluation of the problem, with thought experiments on how clouds will modify the results.¶ The runaway greenhouse has contemporary relevance. There has been high-profile speculation that extreme anthropogenic global change could trigger it13, but this is contrary to existing theory2, 5 and numerical results14. It also sets the inner boundary of the circumstellar habitable zone15, 16 in which the Kepler mission is identifying planetary candidates at present17.¶ We begin with the absolute endmember case of a pure water atmosphere: neither any background gas nor any greenhouse gas other than water. With increasing surface temperature, evaporation from the ocean adds mass to the bottom of the atmosphere, so this is a good approximation for a hot atmosphere in which the water vapour mixing ratio asymptotes to one.¶ The optical depth of the atmosphere, τλ (a function of wavelength), is measured downward from the top. Effective emission to space and attenuation of sunlight occur where τλ~1 (given Beer’s law; I1 = I0exp−τλ, where I0 and I1 are the incident and transmitted radiance), so plotting the altitude of τλ = 1 shows where emission to space and absorption of sunlight dominantly occur (Fig. 1).¶ Figure 1: Spectra and effective absorption and emission levels in a pure water atmosphere.¶ Spectra and effective absorption and emission levels in a pure water atmosphere.¶ Ts is surface temperature. a, Spectrum of downward solar flux at the surface. No line data are available for the grey shaded area. b, Altitude at which optical depth is unity. Solid line is absorption optical depth and dashed line is Rayleigh scattering optical depth. Background shading is atmospheric temperature. c, Spectrum of outgoing thermal flux at the top of the atmosphere. Solid lines are the black body flux at the surface temperature. Dotted lines are the black-body flux for 280 and 400 K for comparison. See also Supplementary Fig. S2.¶ Full size image (253 KB)¶ Figures/tables index¶ Next¶ For thermal emission, τλ = 1 is either near the surface or not reached for low surface temperatures (Ts), but rises towards high altitudes as the planet warms. While Ts≲1,600 K, the temperature of τλ = 1 remains between 250 and 300 K, so the top of atmosphere thermal spectrum is bounded by Planck functions for temperatures of 250 and 300 K, and is independent of Ts. Thus, the Simpson–Nakajima radiation limit emerges as 282 W m−2 (Fig. 2), lower than previous estimates (for example, 310 W m−2, ref. 9). When Ts≳1,600 K the upper atmosphere temperature gradient is sufficiently steep that the temperature reaches 400 K at τλ = 1 in the 4 μm water vapour window (Fig. 1c). Hence, a new peak in thermal radiation emerges, sufficient to permit a new stable climate with a steam atmosphere. No surface radiation escapes directly to space. Observation of this emission peak in a (exo)planetary atmosphere would indicate that the planet is in a runaway greenhouse state.¶ Figure 2: Top of atmosphere fluxes from a pure water atmosphere.¶ Top of atmosphere fluxes from a pure water atmosphere.¶ a, solar; b, thermal; and c, net flux. Colours identify different surface albedos: green for 12% and purple for 25%. Steady-state climates are found where the net outgoing flux is zero; stable steady states are where the flux is increasing with increasing temperature as it passes through zero, and unstable steady states are where it decreases with increasing temperature as it passes through zero.¶ Full size image (256 KB)¶ Previous¶ Figures/tables index¶ Next¶ Earth’s atmosphere is largely transparent to solar radiation. However, for water-rich atmospheres, increasing temperatures are accompanied by increases in atmosphere pressure and water vapour absorption. The additional pressure increases the Rayleigh scattering optical depths at shorter wavelengths, whereas near-infrared water vapour vibration rotation bands increase the absorption optical depth at longer solar wavelengths. Both processes attenuate sunlight, very little of which reaches the surface, so surface albedo no longer affects the radiation budget. In the limiting case, for a pure water atmosphere without clouds and the present solar flux, a maximum of 294 W m−2 is absorbed, much higher than the previous estimate9 of 222 W m−2.¶ Given a hot, moist and cloud-free atmosphere, the net absorption of sunlight would slightly exceed the thermal radiation limit. This implies that a cloudless runaway greenhouse, steam atmosphere, would be stable under the present insolation. Earth today has a stable temperate climate (the requirements for which are discussed in the next section) implying a climate bistability with respect to the runaway greenhouse (previously seen in a grey atmosphere model18). Both the solar and thermal calculations represent upper bounds for a pure water atmosphere—clouds could reduce either, moving the bifurcation point.¶ Previous work suggested that the thermal radiation limit does not depend on the presence of non-condensable greenhouse gases2, 9. This is not strictly correct. The radiation limit depends on the minimum absorption cross-section in the 10 μm water vapour window; any additional opacity here would raise the τλ = 1 surface to a higher altitude that radiates at a lower temperature. As purely theoretical tests, we set 1% each of our atmospheres to be carbon dioxide or ammonia, then 1% of both. The radiation limit decreased by 2 W m−2 for 1% CO2, 6 W m−2 for 1% NH3 and 8 W m−2 for both (Supplementary Fig. S7). Ammonia is one of the strongest absorbers around 10 μm, so deeper reductions to the radiation limit seem unlikely.¶ These results are sensitive to the absorption cross-sections used. First, using the most detailed spectral line list for water (we use HITEMP2010 (ref. 19)) and correct Rayleigh scattering cross-sections for water are essential. Using a less comprehensive line list (for example, HITRAN 2008), or Rayleigh scattering for air instead of water, gives erroneous results (Supplementary Figs S3–S6). Relative to previous results, our lower thermal emission and higher solar absorption are due to these absorption coefficient changes and increased spectral resolution. Second, the strength of the water vapour continuum (the smoothly varying absorption in the window regions) is very important. In the infrared, the continuum we use is weaker than indicated by the most recent data20 (Supplementary Fig. S9), so our estimates are conservative and the Simpson–Nakajima limit is probably slightly lower than our estimate. The uncertainty wedge associated with the continuum grows towards shorter wavelengths, and there are no measurements in the visible region. Our (or any other) solar calculations must be regarded as provisional until such measurements are made.¶ Transition to a runaway greenhouse¶ Abstract• Introduction• Pure water atmospheres• Transition to a runaway greenhouse• Other times and other planets• Methods• References• Acknowledgements• Author information• Supplementary information¶ Given that a cloud-free steam atmosphere seems to be a stable state at the present solar constant, one should examine both how the stable temperate climate is maintained on Earth and the conditions that would lead to a runaway greenhouse. Hence, we examined transitional atmospheres (up to 400 K) with the same mass of background gas as Earth and various greenhouse gas inventories (Table 1).¶ Table 1: Greenhouse gas inventory scenarios used in transitional atmospheres.¶ Full table¶ Figures/tables index¶ At 280 K, the surface emits directly to space through the water vapour window (Fig. 3). For surface temperatures above 310 K the temperature of the emitting level remains between 250 and 300 K, regardless of the surface temperature. If greenhouse gases other than water are more abundant, τλ = 1 is higher in the absorption bands of these gases and less radiation is emitted overall. However, the relative magnitude of this effect decreases in hotter atmospheres with more water. In flux terms (Fig. 4), for the endmember case of a saturated, cloud-free atmosphere with contemporary surface albedo, the net absorbed solar radiation exceeds thermal emission in all scenarios except that with no greenhouse gases other than water, implying that a runaway greenhouse should occur. As this has manifestly not happened to Earth, we are led to the conclusion that a combination of atmospheric subsaturation and an excess of cloud albedo forcing over cloud greenhouse forcing prevents a runaway greenhouse on Earth today.¶ Figure 3: Spectra of thermal emission level and outgoing thermal radiation for transitional atmospheres.¶ Spectra of thermal emission level and outgoing thermal radiation for transitional atmospheres.¶ Black is baseline case; red is with 5,000 ppmv CO2. a, Altitude where optical depth is unity. Most outgoing thermal radiation is emitted from this level. Background colour is atmospheric temperature. b, Top of atmosphere emission spectra. Solid grey lines are the surface emission for each case. Dotted grey lines are for Planck functions of 220, 250, 280, 310, 340 and 370 K up to the surface temperature. The broad 5–8 μm absorption feature is from water and the smaller absorption features at 4.2 μm and 15 μm are from carbon dioxide.¶ Full size image (296 KB)¶ Previous¶ Figures/tables index¶ Next¶ Figure 4: Top of atmosphere fluxes from transitional atmospheres.¶ Top of atmosphere fluxes from transitional atmospheres.¶ a–c, With a surface albedo of 12%. d–f, With a surface albedo of 25%. Colours identify the greenhouse gas inventories from Table 1 (black is baseline, blue is pre-industrial, green is RCP 8.5 at 2100, red is extreme anthropogenic and purple is arbitrarily high). Solid lines are atmospheres saturated with water vapour throughout, whereas dashed lines are subsaturated where the saturation mixing ratio is less than 5%. Steady-state climates exist where the net outgoing flux is zero, stable where flux increases with temperature and unstable where flux decreases with temperature.¶ Full size image (237 KB)¶ Previous¶ Figures/tables index¶ Next¶ First, we relax the assumption of saturation. Our nominal relative humidity profile (Methods) yields a stable climate only for the case of no additional greenhouse gases, although a marginally stable result was obtained for pre-industrial greenhouse gas concentrations. The assumed relative humidity profile is a source of uncertainty in one-dimensional (1D) models. With convection parameterization in a 1D model, a nonlinear transition from subsaturation to saturation around 310 K was found10, introducing an additional bistability in climate that is not found with climatological relative humidity profiles such as ours10. In Earth’s tropics, columns of dry air prevent a local runaway greenhouse21. Nonetheless, our results indicate that subsaturation alone is probably not sufficient to prevent a runaway greenhouse today (Fig. 4).¶ Thus, we turn our attention to clouds. Today, these give an albedo forcing of 50 W m−2 and a greenhouse forcing of 26 W m−2 (ref. 22). Climatological mean top of atmosphere fluxes are 239.4 W m−2 net solar absorbed and 238.5 W m−2 outgoing thermal23 (the 0.9 W m−2 discrepancy is causing global warming). High, cold, clouds have a dominant greenhouse effect (though also reflect). Low cloud has a dominant albedo effect. At first approximation, we simulate this by increasing surface albedo; doubling our 12% albedo approximately represents the low cloud forcing. Our subsaturated pre-industrial cases with present surface temperature and enhanced albedo (Fig. 4) have top of atmosphere solar and thermal fluxes of 263 and 266 W m−2, reasonably approximating climatology minus high cloud forcing. In all of our scenarios (other than arbitrarily high CO2), there is a stable climate under this assumption. Thus, we can infer that the excess of cloud albedo over cloud greenhouse forcing, in combination with subsaturation, permits stable temperate climate on Earth.¶ The clear-sky fluxes are upper bounds: clouds could reduce either flux, making the runaway more or less likely. Previously9 it was argued that cloud reflection would dominate over cloud greenhouse in an optically thick atmosphere. However, this misses a critical distinction based on the level of the clouds. The atmosphere is more transparent to sunlight than thermal radiation, so τλ(solar) = 1 is at lower altitude than τλ(thermal) = 1, so there are three categories of cloud effect based on these. Below τλ(solar) = 1, clouds will have negligible effect. Between τλ(solar) = 1 and τλ(thermal) = 1, albedo will dominate. Above τλ(thermal) = 1, cloud greenhouse will probably dominate (although reflection may dominate if the clouds are more than four times thicker than the present global mean24). The largest projected increase in the water vapour mixing ratio is in the upper atmosphere (Supplementary Fig. S1), suggesting that high clouds would increase most (although this is speculative). For near-future global warming, the present best estimates are for clouds to exert a positive forcing25 (that is, enhanced greenhouse dominating).¶ Steady-state climates exist where the net flux (thermal minus solar) is zero; stable where the net flux increases with temperature and unstable where it decreases with temperature (Fig. 4). For small greenhouse gas inventories, the outgoing thermal flux overshoots the Simpson–Nakajima limit giving a ‘hump’ of stability; excess thermal emission will give a negative feedback that will restore stable, temperate, climate. Using the subsaturated, 25% albedo runs as a reference, the hump of stability is 24 W m−2 for pre-industrial, 18 W m−2 for representative concentration pathway (RCP) 8.5 at 2100 and 8 W m−2 for extreme anthropogenic. With our arbitrarily high greenhouse gas scenario (30,000 ppmv CO2), this vanishes and there is no stable temperate climate. Greenhouse gases do not simply warm the planet, but also lower or remove the energy barrier between temperate climate and a runaway greenhouse.¶ Other times and other planets¶ Abstract• Introduction• Pure water atmospheres• Transition to a runaway greenhouse• Other times and other planets• Methods• References• Acknowledgements• Author information• Supplementary information¶ A runaway greenhouse has manifestly not occurred on post-Hadean Earth—it would have sterilized Earth (there is observer bias). Palaeoclimate gives us a sample of conditions where a runaway greenhouse did not occur, but cannot tell us the size of any safety margin. The so-called ‘hothouse’ climate of the Eocene is the most useful constraint for anthropogenic change. With the solar constant 1% less than today and a few thousand ppmv CO2, the mean temperature was ~ 10 K warmer than today26. With CO2 and temperature both higher then than we expect in the foreseeable future27, this implies that an anthropogenic runaway greenhouse is unlikely. Deglaciaton from Neoproterozoic snowball Earth events probably required that ~ 10% of the atmosphere was carbon dioxide. The solar constant was 6% less than today, so net solar radiation absorbed would have been 12 W m−2 less and climate not yet bistable. By contrast, deglaciation from a snowball Earth event in the future might trigger a runaway greenhouse.¶ Venus probably experienced a runaway greenhouse in the past, evident now in enrichment of D/H in ifets atmosphere7, 28. Previous work suggested that early Venus was close to the threshold for a runaway greenhouse9—our new lower radiation limit and enhanced solar absorption imply that, given the same amount of nitrogen in the atmosphere as Earth, Venus may not have had a habitable period. However, if early Venus had at least as much nitrogen in its atmosphere as it does now this would have had a protective effect (Fig. 5). More nitrogen gives more Rayleigh scattering, decreasing absorbed solar radiation in a transitional atmosphere.¶ Figure 5: Top of atmosphere fluxes from an ideal gas atmosphere with a varying amount of background gas (nitrogen).¶ Top of atmosphere fluxes from an ideal gas atmosphere with a varying amount of background gas (nitrogen).¶ a, Solar; b, thermal; and c, net flux. All runs for baseline (no non-condensable greenhouse gas) with surface albedo of 12%. Colours are: blue for 0.1 bar, turquoise for 0.33 bar, black for 1 bar, orange for 3 bar and red for 10 bar.¶ Full size image (401 KB)¶ Previous¶ Figures/tables index¶ As the solar constant increases with time, Earth’s future is analogous to Venus’s past. We expect a runaway greenhouse on Earth 1.5 billion years hence if water is the only greenhouse gas, or sooner if there are others. Earth’s atmospheric nitrogen inventory has probably changed with time29. Any future decrease would lessen the protective effect of Rayleigh scattering and hasten a runaway greenhouse (in contrast to previous arguments30).¶ Our pure water calculations were aimed at hot atmospheres, but should also apply to water worlds, analogous to a warm version of Jupiter’s moon Europa. In the absence of Rayleigh scattering from background gas, planetary albedo would be lower than Earth. Under Earth’s insolation, without clouds and with 12% surface albedo (the average for Earth, about twice that of sea water), there is no stable temperate climate and a runaway greenhouse would always ensue. Arbitrarily increasing surface albedo to 25% (a proxy for low cloud reflection) gives a marginally stable state at 275 K. With a mean surface temperature this low, ice albedo feedback would probably lead to low-latitude glaciation (snowball Earth-like). A transient warming sufficient to melt the ice would probably cause a transition directly to a runaway greenhouse. Unless mediated by other atmospheric constituents or clouds, there would be no stable temperate climate state.¶ The runaway greenhouse sets a hard limit for the inner edge of the circumstellar habitable zone15, 16. This classic definition neglects multiple climate equilibria so may be misleading. Three major stable climate states exist at the same solar constant: snowball Earth (at least transiently reduced habitability), temperate (habitable) or runaway greenhouse steam atmosphere (sterilizing)18. Changes to clouds today may be sufficient to transition from temperate to either other state. Determining surface temperature requires knowledge of the atmospheric state and history: it is not possible to determine a habitability a priori from incident stellar radiation.¶ The thermal radiation limit depends weakly on the mass of the planet (Supplementary Fig. S8). Everything else being equal, a Mars-size planet would be more susceptible to a runaway greenhouse and a so-called super-Earth less11.¶ Revisiting the classic planetary sciences problem of the runaway greenhouse with modern modelling tools, we have shown that the thermal radiation limit is lower and that more solar radiation is absorbed. The runaway greenhouse may be much easier to initiate than previously thought. A renewed modelling effort is needed, addressing both Earth and planetary science applications. We have begun this process with a single column, clear-sky model, which has allowed us to advance the core radiative transfer aspect of the problem. Reference calculations are available as Supplementary Information to permit future model testing. Our work should be followed with cloudy column models and then, ultimately, general circulation models (to address the cloud and relative humidity distributions). The latter represents a grand challenge in climate modelling, for which present-generation models may be insufficient: there are difficulties associated with radiative transfer, clouds and dynamics (with a major component being condensable), and no empirical comparison cases.

### 2NC AT: Warming Inevitable

#### Not too late—recent ev

Rockstrom ‘15 (Johan – Professor of Environmental Science at Stockholm University, “Bounding the Planetary Future: Why We Need a Great Transition,” Great Transition Initiative, April 2015, p. 6—7, <http://www.greattransition.org/images/GTI_publications/Rockstrom-Bounding_the_Planetary_Future.pdf>)

This shift of paradigm must promote anticipatory action, since triggers that set irreversible change in motion can occur much earlier than the later catastrophic tipping points. For example, the East Siberian Arctic shelf holds a vast stock of sea floor methane hydrates (potentially 50 to 500 Gt of carbon compared to the 550 Gt emitted since the industrial revolution). Methane, which is roughly twenty times more potent a greenhouse gas than CO2 even though it stays in the atmosphere for a shorter time, has started to leak in low volumes as the seabed and tundra thaw. The risk lies in a changing climate crossing an irreversible threshold (if it has not done so already) at which methane will flow in rising volumes. Paleo-climatic data shows that rapid global warming of 5 to 6 ºC (9 to 10.8 ºF) within one or a few decades has occurred in the past, phenomena that can only be explained by Earth system feedbacks, such as the abrupt release of methane hydrates from continental shelves.16 The self-reinforced warming that results from melting ice sheets as the reduced albedo (reflectivity) feeds back to enhance climate change offers another example of a triggering process in action. In 2012, for the first time, the entire surface of the Greenland ice sheets was observed to be melting in July for about two weeks. Correspondingly, the climate feedback from Greenland shifted from net cooling (negative feedback) to net warming (positive feedback), as the albedo dropped by close to 50%. Approximately 300 EJ of heat, equal to half of global annual energy use, were injected into the atmosphere during this two-week period. Under business-as-usual projections, the window for stabilizing global warming below 2 ºC (3.6 ºF) will close by 2023, even without sudden surprises like methane outbursts.17 The same narrow timespan holds for biodiversity loss, where critical functions in ecosystems (such as pollination and the ability of coral reefs to remain stable) may be irreversibly destroyed. The world thus urgently needs a great transition that rapidly bends the curve of negative global environmental change. Such a turn toward sustainability demands a deep shift in the logic of development away from the assumption of infinite growth toward a paradigm of development and human prosperity within Earth limits. It will require transformations in energy systems, urban development, food systems, and material use. Achieving all this will entail fundamental institutional changes in economic arrangements, financial systems, and world trade.

### Turns Heg/Conflicts

#### Turns heg and everything

Chuck Hagel 14, US Secretary of Defense, “Department of Defense: FY 2014 Climate Change Adaptation Roadmap,” <http://www.acq.osd.mil/ie/download/CCARprint.pdf>, DOA: 1-13-15, y2k

The responsibility of the Department of Defense is the security of our country. That requires thinking ahead and planning for a wide range of contingencies. Among the future trends that will impact our national security is climate change. Rising global temperatures, changing precipitation patterns, climbing sea levels, and more extreme weather events will intensify the challenges of global instability, hunger, poverty, and conflict. They will likely lead to food and water shortages, pandemic disease, disputes over refugees and resources, and destruction by natural disasters in regions across the globe. In our defense strategy, we refer to climate change as a “threat multiplier” because it has the potential to exacerbate many of the challenges we are dealing with today – from infectious disease to terrorism. We are already beginning to see some of these impacts. A changing climate will have real impacts on our military and the way it executes its missions. The military could be called upon more often to support civil authorities, and provide humanitarian assistance and disaster relief in the face of more frequent and more intense natural disasters. Our coastal installations are vulnerable to rising sea levels and increased flooding, while droughts, wildfires, and more extreme temperatures could threaten many of our training activities. Our supply chains could be impacted, and we will need to ensure our critical equipment works under more extreme weather conditions. Weather has always affected military operations, and as the climate changes, the way we execute operations may be altered or constrained. While scientists are converging toward consensus on future climate projections, uncertainty remains. But this cannot be an excuse for delaying action. Every day, our military deals with global uncertainty. Our planners know that, as military strategist Carl von Clausewitz wrote, “all action must, to a certain extent, be planned in a mere twilight.”

#### Climate change destabilizes international order—triggers armed conflicts and state failure.

**Scheffran** **9**—Jurgen, a Senior Research Scientist in the Program in Arms Control, Disarmament and International Security (ACDIS) of the University of Illinois, adjunct faculty appointments at the Departments of Atmospheric Sciences and Political Science. PhD (physics) at the University of Marburg in Germany. Researcher in the interdisciplinary research group IANUS and at the mathematics department of the Technical University of Darmstadt. Member of Potsdam Institute for Climate Impact Research (PIK) Visiting Professor at the University of Paris (Pantheon/Sorbonne), “THE GATHERING STORM: IS CLIMATE CHANGE A SECURITY THREAT?” 7-03-09 <http://gees.org/files/documentation/doc_Documen-03518.pdf> accessed date: 6-1-12 y2k

Altogether, climate change could trigger a cycle of environmental degradation, economic decline, social unrest and political instability that could accumulate to become a security threat and aggravate conflicts. Complex couplings between multiple factors could further contribute to instability. For instance, due to water scarcity and soil degradation, agricultural yields could further drop, diminishing food supply. Extreme weather events put the economic infrastructure at risk, including industrial sites and production facilities as well as networks for transportation and supply of goods. In parts of the world the erosion of social order, state failure and violence go hand in hand. Food insecurity in one country may further increase competition of resources and force population to migrate into neighbor countries. In some cases, climate change could interact with other forces to degenerate into armed conflicts, in other cases the suffering of people may strengthen the readiness to help and cooperate. For instance, the tragedy facing the Inuit cuture and society or the expected flooding of smalisland states have strengthened international support for emission reductions. Conflicts may spread to neighboring states, e.g. through refugee flows, ethnic links, environmental resource flows or arms exports. Such spillover effects can destabilize regions and expand the geographical extent of a crisis, overstretching global and regional governance structures. In less wealthy regions climate change adds to already stressing conditions – high population growth, inadequate freshwater supplies, strained agricultural resources, poor health services, economic decline and weak political institutions–and becomes an additional obstacle to eco nomic growth, development and political stability. 17 Weak, poor and fragile states, which are unable to cope with climate impacts, will be most affected, thereby increasing the risk of conflicts. In societies on the edge to instability the marginal impact of climate change can make a big difference. “Failing states” with weak governance structures have inadequate management and problem solving capacities and cannot guarantee the core functions of government, including law, public order and the monopoly on the use of force, all of which are pillars of security and stability. In weak or failing states climate change could overstretch the already limited capacity of governments to respond effectively to the challenges they face. A government that is unable to meet the needs of its population as a whole or to provide protection against hardships could trigger frustration, lead to tensions between different ethnic and religious groups within countries and to political radicalization. This could destabilize countries and even entire regions. The most serious climate risks and conflicts are expected in poor countries which are vulneaable to climate change and have less access to capital to invest in adaptation, but more wealthy countries are not immune. While the impacts on some developed countries may be moderate or even positive at small temperature changes (greater agricultural productivity, reduced winter heating bills, fewer winter deaths), they will likely become more damaging at higher temperatures as predicted towards the end of this century. The security implications of climate change also depend on the meaning of security which has continuously evolved since the Cold War. Security during the bilateral East-West conflict was reduced to military force assessments. In the emerging new world disorder, a large number of actors and interconnected factors shape the security discourse, including political, military, economic, technological, health and environmental dimensions. The concept of ecological security transforms environmental problems into security threats, but was criticized as too broad and unspecific, partly because it would allow the military to expand its instruments into environmental policy.

#### Warming massively increases conflict—systemic and empirical evidence concludes.

**McMichael et al**, **3-19**-12—Professor of population health, Australia Fellow of National Health and Medical Research Council, Tony, Hugh Montgomery professor of intensive care medicine, director of UCL Institute for Human Health and Performance, Anthony Costello professor of international child health, director of UCL Institute for Global Health, University College London, “Health risks, present and future, from global climate change” <http://www.bmj.com/content/344/bmj.e1359.pdf%2Bhtml> accessed date: 6-1 y2k

That weather and climate can affect the risk of conflict is evident from history. Disease, starvation, drought, loss of habitat, loss of natural resources, and economic impacts are powerful drivers. Local wars in Africa in recent decades have peaked during very hot and dry years, in association with reduced food yields. Further evidence comes from study of the El Niño-Southern Oscillation (ENSO), which affects weather in many regions including Africa, Asia, and the Americas. In the warmer (El Niño) phase, land temperatures may rise and rainfall decline, bringing droughts that last several years. A study of 175 countries and 234 conflicts during 1950-2004 estimated that in the large subset of countries known to be affected by El Niño events, the chance of civil war breaking out doubled during such warmer spells. The study’s authors calculated that El Niño may have played a role in over a fifth of civil conflicts since 1950. Such climatic drivers as these can also lead to migration, often to areas where resources are already strained, and the risk of conflict greater still. Climate change thus acts as a force multiplier, amplifying the negative health impacts of other environmental stressors (such as land degradation, soil nitrification, depletion of freshwater stocks, ocean acidification, and biodiversity loss). Populations with high pre-existing rates of climate sensitive diseases and conditions, such as child diarrhoea, malaria, under-nutrition, asthma, atherogenic cardiovascular disease, and extreme heat exposures in workplace settings, could suffer large absolute increments in adverse health impact with relatively small changes in climate. Indeed, conservative extrapolation of estimates made for the year 2000 suggested that climate change is now causing some 200 000 premature deaths each year (from under-nutrition, diarrhoeal disease, malaria, and flooding), with over 90% of these occurring in low income countries(especially sub-Saharan Africa and South Asia), and 85% in children under 5 years of age.

#### Climate change triggers natural disasters—Robust evidence shows there’s high risk of violent conflicts in the short-term, regardless of the intensity of disasters.

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In light of the signiﬁcant insights produced by the literature on the effects of environmental transformation on civil war, it is surprising that so few analysts have systematically explored the links between natural disasters and violent civil conﬂict in detail. The lack of large N cross-section time-series data is partly to blame, but so is the tendency by political scientists and other conﬂict specialists to underestimate the importance of geography and environmental factors. Given the growing importance of environmental factors as climate change kicks in and as natural ecologies are stretched to the limit, it becomes all the more important to correct this oversight. This paper contributes to the violent civil conﬂict literature by looking at the net risks posed by the number and type of natural disasters, weighted for population and territory size, for the onset of both minor and major violent civil conﬂict. On explicit theoretical grounds, we expect natural disasters to increase the risk of violent civil conﬂict through their proximate and structural macro-social effects, increasing the motive, incentive, and opportunity for conﬂict. By increasing grievances and increasing the incentive for resource grabs, while reducing state ability to respond (therefore redistributing collective action resources), natural disasters have powerful social impacts which can act to destabilize society. Using a comprehensive data set that covers 187 political units and the whole second half of the twentieth century, we ﬁnd robust evidence that rapid-onset natural disasters signiﬁcantly increase the risk of violent civil conﬂict in the short to medium term. As a rule, earthquakes and volcanoes hold somewhat higher civil-conﬂict risks than do climate-related disasters, but the conﬂict effects of the latter are also quite signiﬁcant. Epidemics and insect infestations are the least likely to result in violent civil conﬂict. The relationship between the number of climate-related natural disasters experienced by a political unit and the risk of violent civil conﬂict is curvilinear, tracing an inverted U, with an upper turning point between ﬁve and eight climate-related disasters. Looking at all incidences of violent civil conﬂict, we ﬁnd that income inequality, proxied by infant mortality rate, is an important intervening factor that determines when and where rapid-onset natural disasters give rise to conﬂict. In addition, the conﬂict risk posed by natural disasters is higher in political units with mixed regimes than in autocracies or consolidated democracies. Autocracies are less conﬂict prone given the preponderance of state repressive capacity but also because some autocracies are quite successful in addressing grievance issues such as income inequality (pre-democratic Indonesia and South Korea being prime examples). Consolidated democracies provide legitimate channels for voicing dissent, and the incentives to engage in violence are less than in a partial, incomplete democracy. Disaster intensity seems to be relatively unimportant, and does not explain the difference between minor and major incidences of violent civil conﬂict. These ﬁndings are robust to the use of different versions of the dependent variable, and to a range of alternative speciﬁcations of the explanatory and control variables. Rapid-onset natural disasters are signiﬁcant predictors of the risk of civil war in societies with mixed regimes, low economic growth rates, and intermediate to relatively high levels of income inequality, whether we weigh for population size or not, whether we control for the size of the total area covered by a political unit or not, whether we control While our main results are robust, we are less conﬁdent that we have exhausted the factors that determine when and where natural disasters increase the risk of major violent civil conﬂict. The analysis reveals signiﬁcant differences between the minor and major subsets of violent civil conﬂict, but we are hesitant to overemphasize these differences given the imprecision of the criterion used to distinguish between the two subsets in the PRIO⁄Uppsala data set. Nevertheless, the detected differences point to the conclusion that the destruction caused by geological disasters inhibit the development of major conﬂict in the short term. We also ﬁnd that youth bulges are more of a threat for the onset of minor than for major violent civil conﬂict. In addition, the conﬂict history of a society is signiﬁcant in accounting for the outbreak of major incidences of violent civil conﬂict, but less so in the case of minor conﬂicts where the contingency of natural disasters seems to be an overriding factor. There is clearly different dynamics 35 Gates et al. (2006) ﬁnd a systematic pattern of self-enforcing equilibria in the case of autocracies and consolidated democracies which are absent in the case of mixed regimes. See also Epstein et al. (2006). Philip Nel and Marjolein Righarts 179at play in the case of major compared to minor violent civil conﬂict, although natural disasters in both cases signiﬁcantly increase the risk of violent civil conﬂict. More research is called for to identify those structural features of conﬂictprone societies that the brevity of peace variable nicely reﬂects in the case of major violent civil conﬂict, but which remain largely unaccounted for in our speciﬁcations. We also believe that ﬁner time-calibrated onset data can assist in drawing clearer causal conclusions, while further research is also necessary to test for the cross border impacts of natural disasters and how international responses to natural disasters affect social outcomes. One further important factor which we had to ignore due to absence of systematically collected data is the effect that disaster refugees could have. Does the presence of large numbers of displaced persons increase or decrease the risk of civil conﬂict Data restrictions also prevented us from testing for the impact of natural disasters on conﬂict duration or termination. However, the empirical results registered above conﬁrm the hypothesis that sudden, cataclysmic environmental change signiﬁcantly increases the risk of civil conﬂict. Now that we know which disaster-prone countries face the higher risk of violent civil conﬂict, we can combine this information with analytic tools such as Disaster Hotspots (Dilley, Chen, Deichmann, Lerner-Lam, Arnold, Agwe, Buys, Kjekstad, Lyon, and Yetman 2005) and the IPCCs regional predictions of future ‘‘extreme climatic events’’ to provide socially sensitive early-warning and disaster-monitoring systems. Given the dire predictions that natural disasters are set to become more frequent in the near future, conﬂict reduction and management strategies in the twenty-ﬁrst century simply have to be more attuned to the effects of natural disasters than they have been up to now. for income level or not, and whether we systematically remove outliers or not.

### Turns Africa

#### Warming causes African conflicts—robust data confirms.

**Miguel et al 9**—Edward is professor of economics and director of the Center for Effective Global Action @ University of California, Berkeley. Marshall B. Burke, Department of Agricultural and Resource Economics and Department of Economics, University of California Berkeley, Shanker Satyanath is Associate Professor of Politics @ NYU. John A. Dykema, PhD in applied physics from Harvard, David B. Lobell is an Assistant Professor at Stanford University. “Warming increases the risk of civil war in Africa” 12-8-09 <http://www.pnas.org/content/106/49/20670.full.pdf+html> accessed date: 7-15-12 y2k

The large effect of temperature relative to precipitation is perhaps surprising given the important role that precipitation plays in rural African livelihoods and previous work emphasizing the impact of falling precipitation on conflict risk (2). In fact, precipitation and temperature fluctuations are negatively correlated (r 0.34) over our study period, suggesting that earlier findings of increased conflict during drier years might have been partly capturing the effect of hotter years. The inferred precipitation effect is stronger in the current study when using the same precipitation dataset as in ref. 2 (Table S3), suggesting that the role of precipitation remains empirically ambiguous, perhaps because the high spatial variability of precipitation is less well captured than temperature variability by the relatively coarse climate data. Nevertheless, the temperature signal is robust across datasets and is consistent with a growing body of evidence demonstrating the direct negative effects of higher temperatures on agricultural productivity and the importance of these fluctuations for economic performance (10, 11, 19). Temperature can affect agricultural yields both through increases in crop evapotranspiration (and hence heightened water stress in the absence of irrigation) and through accelerated crop development, with the combined effect of these 2 mechanisms often reducing African staple crop yields by 10%–30% per °C of warming (3, 11, 20). Because the vast majority of poor African households are rural, and because the poorest of these typically derive between 60% and 100% of their income from agricultural activities (21), such temperature-related yield declines can have serious economic consequences for both agricultural households and entire societies that depend heavily on agriculture (10). Finally, because economic welfare is the single factor most consistently associated with conflict incidence in both crosscountry and within-country studies (1, 2, 14–16), it appears likely that the variation in agricultural performance is the central mechanism linking warming to conflict in Africa. Yet because our study cannot definitively rule out other plausible contributing factors—for instance, violent crime, which has been found to increase with higher temperatures (22), and nonfarm labor productivity, which can decline with higher temperatures (23)— further elucidating the relative contributions of these factors remains a critical area for future research. Nevertheless, the robustness of the reduced-form relationship between temperature and conflict across many alternative model specifications argues for a large direct role of temperature in shaping conflict risk. When combined with the unanimous projections of near-term warming across climate models and climate scenarios, this temperature effect provides a coherent and alarming picture of increases in conflict risk under climate change over the next 2 decades in Africa. Furthermore, the adverse impact of warming on conflict by 2030 appears likely to outweigh any potentially offsetting effects of strong economic growth and continued democratization. We view this final result with some caution, however, because economic and political variables are clearly endogenous to conflict; for example, conflict may both respond to and cause variation in economic performance (2) or democratization. Consequently, credibly identifying past or future contributions of economic growth or democratization to civil war risk is difficult. We interpret our result as evidence of the strength of the temperature effect rather than as documentation of the precise future contribution of economic progress or democratization to conflict risk. Similarly, we do not explicitly account for any adaptations that might occur within or outside agriculture that could lessen these countries’ sensitivities to high temperatures, and thus our 2030 results should be viewed as projections rather than predictions. The possibility of large warming-induced increases in the incidence of civil war has a number of public policy implications. First, if temperature is primarily affecting conflict via shocks to economic productivity, then, given the current and expected future importance of agriculture in African livelihoods (24), governments and aid donors could help reduce conflict risk in Africa by improving the ability of African agriculture to deal with extreme heat. Such efforts could include developing betteradapted crop varieties, giving farmers the knowledge and incentives to use them, and expanding irrigation infrastructure where feasible (25). Second, implementing insurance schemes to protect poor societies from adverse climate shocks also could help reduce the risk of civil war in Africa. One possibility is the expansion of weather-indexed crop insurance, which has shown promise in many less-developed countries (26). Another variant would be making the provision of foreign aid contingent on climate risk indicators—‘‘rapid conflict prevention support’’ (27)—to bolster local economic conditions when the risk of violence is high. Our findings suggest that the need for such mechanisms in Africa will become increasingly urgent as global temperatures continue to rise.of violence is high. Our findings suggest that the need for such mechanisms in Africa will become increasingly urgent as global temperatures continue to rise

### Turns Arctic

#### Warming causes artic conflict—most likely scenario for armed escalation because there is no legal structure that mediates political disagreements.

**Borgerson, 8**—Scott has PhD and is Adjunct Senior Research Scholar, Head of the Arctic and Climate Change Project, Marine Transportation Program, MT Study Member, International Affairs Fellow at the Council of Foreign Relations and a former Lieutenant Commander in the U.S. coast guard. “Arctic Meltdown: The Economic and Security Implications of Global Warming” Foreign Affairs, Vol. 87, No. 2 (Mar. - Apr., 2008) JSTOR. Accessed date: 6-10-12 y2k

THE ARCTIC has always experienced cooling and warming, but the current melt defies any historical comparison. It is dramatic, abrupt, and directly correlated with industrial emissions of greenhouse gases. In Alaska and western Canada, average winter temperatures have increased by as much as seven degrees Fahrenheit in the past 6o years. The results of global warming in the Arctic are far more dramatic than elsewhere due to the sharper angle at which the sun's rays strike the polar region during summer and because the retreating sea ice is turning into open water, which absorbs far more solar radiation. This dynamic is creating a vicious melting cycle known as the ice-albedo feedback loop…

DESPITE THE melting ice cap's potential to transform global shipping and energy markets, Arctic issues are largely ignored at senior levels in the U.S. State Department and the U.S. National Security Council. The most recent executive statement on the Arctic dates to 1994 and does not mention the retreating ice. But the Arctic's strategic location and immense resource wealth make it an important national interest. Although the melting Arctic holds great promise, it also poses grave dangers. The combination of new shipping routes trillions of dollars in possible oil and gas resources, and a poorly defined picture of state ownership makes for a toxic brew. The situation is especially dangerous because there are currently no overarching political or legal structures that can provide for the orderly development of the region or mediate political disagreements over Arctic resources or sea-lanes. The Arctic has always been frozen; as ice turns to water, it is not clear which rules should apply. The rapid melt is also rekindling numerous interstate rivalries and attracting energy-hungry newcomers, such as China, to the region. The Arctic powers are fast approaching diplomatic gridlock, and that could eventually lead to the sort of armed brinkmanship that plagues other territories, such as the desolate but resource rich Spratly Islands, where multiple states claim sovereignty but no clear picture of ownership exists.

### Turns Disease

#### Climate change causes deadly disease spread—impact is extinction.

**McMichael et al**, **3-19**-12—Professor of population health, Australia Fellow of National Health and Medical Research Council, Tony, Hugh Montgomery professor of intensive care medicine, director of UCL Institute for Human Health and Performance, Anthony Costello professor of international child health, director of UCL Institute for Global Health, University College London, “Health risks, present and future, from global climate change” <http://www.bmj.com/content/344/bmj.e1359.pdf%2Bhtml> accessed date: 6-1 y2k

Climate change may bring health benefits to some, at least in the early stages of the process. Milder winters (albeit set against a rise in short term weather variability) may reduce deaths from influenza or cardiovascular disease in some temperate countries, while mosquito populations may recede in areas that become more arid. Improved coverage and use of bed nets, management of stagnant water and mosquito breeding sites, and greater availability of effective drugs may also (at a price) offset population risks from malaria vector expansion. The overall balance of health impacts of climate change, however, is anticipated to be substantially, and increasingly, negative. These negative effects are mediated not only through progressive changes in average climatic conditions, as temperatures rise and precipitation patterns change, but also through changes in regional weather patterns or their stability. Unpredictable weather (sudden cold, hot, wet, or dry spells) and extreme weather events (such as heat waves, floods, and droughts) will become more common. These climatic changes affect human health through mechanisms that may be direct and indirect, immediate or delayed. Four categories of risk to human health can be described. Immediate and direct risks include the primary health impacts of heat waves, extreme weather events, and altered air quality (especially increased concentrations of ground level ozone). The frequency of extreme heat episodes will increase as average temperatures rise, and heat waves and extreme weather events are also expected to become more frequent as climatic conditions become more variable. Ascribing any one particular extreme weather event to climate change is difficult, but scientific confidence has grown that we are already seeing such attributable impacts. For example, it is estimated that climate change has already approximately doubled the probability that a heat wave as severe as the European heat wave in August 2003 will occur again. In November 2011 the Intergovernmental Panel on Climate Change (IPCC) special report on managing the risks of extreme events and disasters suggested that with a scenario of continuing high emissions it is likely that the frequency of heat waves will increase in most regions. Heavy precipitation will occur more often, and the wind speed of tropical cyclones will increase and their number will likely remain constant or decrease. Recent experience of extremes of summer heat in Europe, Asia, and North America has underscored the great threat to health when physiological thresholds are passed. Once the human body’s capacity to cope with increased thermal stress is exceeded, risks of homeostatic failure, disease exacerbation, and death begin to rise rapidly. This is especially the case in older people, those with underlying cardiovascular or chronic respiratory disease, and those who are poor, uneducated, or isolated (and therefore less likely to have access to, or take, preventive action). Such effects are exacerbated by changes in air quality: ground level ozone levels rise with temperature, threatening human health. The greater absolute burden of adverse health impact from heat waves will be in the general community, but workers in various heat exposed workplaces, both outdoors and indoors (if unventilated), are particularly vulnerable. Societies will be hard pressed to prepare for and cope with extreme weather events, especially when these occur on a large scale. The flooding in Pakistan in July 2010 left 160 000 km (or 62 000 square miles, a fifth of the country’s land mass) under water. 2010 also saw the hottest summer in Russia for 130 years, leading to forest and grassland fires burning a similar area, contributing to many deaths, and damaging grain crops. Changes in climatic conditions will affect many climate sensitive infectious diseases, via influences on pathogen maturation and multiplication, on vector organism density and behaviour (such as the mosquito), on the ecology and density of reservoir (intermediate) host species, and on aspects of human behaviour that amplify risks of infection (such as crowding and displacement). Thus, cases of campylo bacteriosis, and infection with Salmonella Typhimurium and Salmonella Enteritidis rise with temperature. Such risks may be offset in countries with sufficient resources, but this may not be the case elsewhere. Changes in the distribution and life cycle of vector organisms will also occur, as will those of their transmitted pathogens. Changes in Lyme disease, malaria, schistosomiasis, trypanosomiasis, onchocerciasis, and leishmaniasis are to be expected, as well as in dengue fever and infections by other arboviruses. The geographical distribution and timing of such changes are difficult to predict. For example, a short term increase in temperature and rainfall associated with the 1997-98 El Niño caused Plasmodium falciparum malaria epidemics in Kenya, but reduced malaria transmission in Tanzania. Malarial zones have apparently extended to higher altitude in western Kenyan highlands ; the schistosomiasis water snail survival zone has extended north in eastern China ; tick borne encephalitis zones have expanded northwards in Sweden; and the ixodid tick, which transmits Lyme disease, has spread northward in eastern Canada. Taken together, these observations suggest that such impacts of climate change may already be taking place. Surface runoff and solid material transportation (for instance, of organic materials) result from heavy rainfall, which is likely to rise in frequency in temperate countries as climate change progresses. Increased water contamination (both particulate and microbial, including from sewerage effluent) is thus likely.Gains in temperature and changes in rainfall and humidity may extend and intensify exposure to allergenic pollen and spores from plants such as ragweed…

### Turns Economy

#### Warming collapses economy—even a small event could have significant impacts.

**UNEP FI 1**—the United Nations Environment Programme Finance Initiative, “Climate Change and the Financial Services Industry” <http://www.dlc.org/documents/UN_Climate-Change_Study.pdf> Accessed date: 8-7-12 y2k

Climate change poses a major risk to the global economy. The increasing frequency of severe climatic events, coupled with social trends, has the potential to stress insurers, reinsurers and banks to the point of impaired viability or even insolvency. Worldwide economic losses due to natural disasters appear to be doubling every 10 years and, on current trends, annual losses will reach almost $150 billion in the next decade. The greenhouse gases (GHGs) which create this problem are longlived so action is urgently needed. A long-term international political framework for climate stability is essential. The Kyoto Protocol, under which many industrialised nations have pledged to curb their emissions of GHGs by 2012, is an important step but does not go nearly far enough. To ensure future economic development is sustainable, it must be based on the principles of precaution and equity. This will be achieved more quickly, and with less economic dislocation, by harnessing market mechanisms with a skilful blend of policies and measures. The ﬁnancial sector therefore has a key role to play in delivering market solutions to climate change. Examples include GHG emissions trading markets and ﬁnance for clean energy technologies. By some estimates, the former could be a $2 trillion/year market by 2012 while the latter could be worth $1.9 trillion by 2020. Recently issued scientiﬁc reports from the Intergovernmental Panel on Climate Change, among others, have afﬁrmed that most global warming over the past 50 years is attributable to human activities. They have also concluded that: • the climate may warm faster than previously thought; • developing countries are most at risk; and • at some point, sudden and irreversible shifts in global climate patterns may occur. The greenhouse gases (GHGs) which create the problem – of which carbon dioxide is the best known – persist for many decades. To stabilise atmospheric concentrations at just twice the preindustrial level would require current emission levels to be cut by 60%. There is, therefore, a growing sense of urgency to act in a meaningful fashion. Worldwide economic losses due to natural disasters appear to be doubling every ten years and, if current trends persist, annual losses will come close to $150 billion in the next decade. A signiﬁcant portion of this will be insured. The experience of the insurance industry shows that even small changes (< 10%) in event severity can generate multiple increases in damage. A pro-active stance by ﬁnancial institutions will help to reduce the threats they face from climate change while also providing opportunities (see Table 1).

#### Climate change disrupts every sector of the economy

**Ruth et al 7**—Matthias Ruth is the Director of Center for Integrative Environmental Research and Roy F. Weston Chair for Natural Economics. Dana Coelho is Research Associate @ Center for Integrative Environmental Research. Daria Karetnikov is Research Assistant @Center for Integrative Environmental Research. “The US Economic Impacts of Climate Change and the Costs of Inaction” <http://www.cier.umd.edu/documents/US%20Economic%20Impacts%20of%20Climate%20Change%20and%20the%20Costs%20of%20Inaction.pdf> Accessed date: 8-7-12 y2k

The effects of climate change will be felt by the entire nation: • all sectors of the economy - most notably agriculture, energy, and transportation - will be affected; • essential infrastructures that afford us reliable services and high standards of living (such as water supply and water treatment) will be impacted; and • ecosystems, on which quality of life relies (such as forests, rivers, and lakes), will suffer . In the West and Northwest, climate change is expected to alter precipitation patterns and snow pack, thereby increasing the risk of forest fires . Forest fires cost billions of dollars to suppress, and can result in significant loss of property . The Oakland, California fire of 1991 and the fires in San Diego and San Bernardino Counties in 2003 each cost over $2 billion . Every year for the past four years, over 7 million acres of forests in the National Forest System have burned with annual suppression costs of $1 .3 billion or more . The Great Plains and the Midwest will suffer particularly from increased frequency and severity of flooding and drought events, causing billions of dollars in damages to crops and property . For example, the North Dakota Red River floods in 1 Executive Summary 31997 caused $1 billion in agricultural production losses, and the Midwest floods of 1993 inflicted $6-8 billion in damages to farmers alone . The Northeast and Mid-Atlantic region will see increased vulnerability to sea level rise and storms . Depending on the category of the event, evacuation costs for the Northeast region may range, for a single event, between $2 and $6 .5 billion . Since 1980, there have been 70 natural weather-caused disasters, with damages to coastal infrastructure exceeding $1 billion per event . Taken together, their combined impact surpassed $560 billion in damages . Decreased precipitation levels in the South and Southwest will strain water resources for agriculture, industry and households . For the agriculturally productive Central Valley in California alone, the estimated economy-wide loss during the driest years is predicted to be around $6 billion per year . Net agricultural income for the San Antonio Texas Edwards Aquifer region is predicted to decline by 16-29% by 2030 and by 30-45% by 2090 because of competing uses for an increasingly scarce resource – water . The true economic impact of climate change is fraught with “hidden” costs . Besides the replacement value of infrastructure, for example, there are real costs of re-routing traffic, workdays and productivity lost, provision of temporary shelter and supplies, potential relocation and retraining costs, and others . Likewise, the increased levels of uncertainty and risk, brought about by climate change, impose new costs on the insurance, banking, and investment industries, as well as complicate the planning processes for the agricultural and manufacturing sectors and for public works projects . Since the early 1990s, and especially during the 21 st century, significant progress has been made in understanding the impacts of climate change at national, regional, and local scales . These studies, many of which are discussed in the pages that follow, highlight physical processes that influence transportation, energy and water supply systems, agriculture and forestry, fisheries, tourism, and other important economic sectors . There is, however, a lack of research that quantifies and compares these impacts, and a deficiency in using what is known about climate impacts to guide adaptation actions from the national level down to the local level . Thus, the full economic costs will likely be much higher than what is reported currently

### Turns Environment

#### Anthropogenic factors destroy climate system—that causes extinction.

**Zhang 12**—WenJun Zhang is Professor of ecology and environmental sciences, Sun Yat-sen University. “Some thoughts on global climate change: will it get warmer and warmer?” 3-10-12 International Academy of Ecology and Environmental Science. Environmental Skeptics and Critics, 2012, 1(1):1-7 <http://www.iaees.org/publications/journals/environsc/articles/2012-1(1)/some-thoughts-on-global-climate-change.pdf> accessed date: 7-15-12 y2k

Many studies discussed climate change without consideration of complexity of climate system. In my view, climate system on our planet is a non-linear and complex system. It possesses all properties that a complex system will have. Because it is a non-linear dynamic system with thousands of variables, it will show various non-linear properties as bifurcation, chaos, catastrophe properties, multiple stable or unstable equilibrium states, etc. The stable state of climate system so far is a conditional stability. The climate system is also a selforganizing system. Human activities (including carbon emission from fossil fuels, deforestation, desertization, etc.) are one of driving variables of climate system. Compared to other driving variables as solar radiation, etc., effects of these driving variables are not periodic and are sometimes destructive to the system. If the strength of these driving variables exceeds some threshold, the system would not restore itself and the stability of the system would be destroyed. Climate system would be out of control or collapsed. In a short term, a varied climate is expected as indicated above. However, for hundreds of years or thousands of years, there are several possibilities that global climate will proceed. We may not exactly predict what outcome will finally occur if destructive human activities continue. However it is increasingly obvious that the equilibrium state of climate system is being broken by destructive human activities. There should be several dynamic patterns for the farther future (Fig. 4): (1) the climate is out of control and becomes warmer and warmer with little fluctuation (Fig. 4 (1)); (2) the climate is out of control and gets colder and colder with little fluctuation, finally falls into an eternal ice age (Fig. 4 (2)); (3) the climate reaches a new stable or unstable equilibrium state (Fig. 4 (3)). A new (stable or unstable) equilibrium state would be realized in a smooth and continuous way, or realized in an abrupt way (by jumping or plummeting). In the unstable equilibrium state, the climate would dramatically change (with temperature downward or upward) if it suffers from great disturbances. Recent years’ (and the coming tens of years’) unusual climate change (Fig. 5) would be a prelude for dramatic climate change in the future. Whatever the scenario is, the varied and extreme climate around the world caused by destructive human activities will certainly destroy our environment and livings in the future (Thomas et al., 2004; Collins, 2009). destroy our environment and livings in the future (Thomas et al., 2004; Collins, 2009).

### Turns Fish

#### Warming collapses fisheries.

**Allison et al 9**—Edward H. Allison is the director of policy @ World Fish Center. Allison L. Perry1,3 , Marie-Caroline Badjeck 1,4 , W. Neil Adger 5 , Katrina Brown 2,5 , Declan Conway 2,5 , Ashley S. Halls 6 , Graham M. Pilling 7 , John D. Reynolds 8 , Neil L. Andrew 1 & Nicholas K. Dulvy 7,8 1 The WorldFish Center, GPO Box 500, Penang, Malaysia; 2 School of Development Studies, University of East Anglia, Norwich, NR4 7TJ, UK; 3 School of Biological Sciences, University of East Anglia, Norwich, NR4 7TJ, UK; 4 Zentrum fu¨r Marine Tropeno¨kologie, University of Bremen, 28359 Bremen, Germany; 5 Tyndall Centre for Climate Change Research, School of Environmental Sciences, University of East Anglia, Norwich, NR4 7TJ, UK; 6 Mekong River Commission, c/- Inland Fisheries Research and Development Institute, P.O. Box 582, Phnom Penh, Cambodia; 7 Centre for Environment, Fisheries and Aquaculture Science, Lowestoft, Suffolk, NR33 OHT, UK; 8 Department of Biological Sciences, Simon Fraser University, Burnaby, V5A 1S5 Canada “Vulnerability of national economies to the impacts of climate change on ﬁsheries” EBSCO. Accessed date: 8-7-12 y2k

Anthropogenic global warming has signiﬁcantly inﬂuenced physical and biological processes at global and regional scales. The observed and anticipated changes in global climate present signiﬁcant opportunities and challenges for societies and economies. We compare the vulnerability of 132 national economies to potential climate change impacts on their capture ﬁsheries using an indicator-based approach. Countries in Central and Western Africa (e.g. Malawi, Guinea, Senegal, and Uganda), Peru and Colombia in north-western South America, and four tropical Asian countries (Bangladesh, Cambodia, Pakistan, and Yemen) were identiﬁed as most vulnerable. This vulnerability was due to the combined effect of predicted warming, the relative importance of ﬁsheries to national economies and diets, and limited societal capacity to adapt to potential impacts and opportunities. Many vulnerable countries were also among the world’s least developed countries whose inhabitants are among the world’s poorest and twice as reliant on ﬁsh, which provides 27% of dietary protein compared to 13% in less vulnerable countries. These countries also produce 20% of the world’s ﬁsh exports and are in greatest need of adaptation planning to maintain or enhance the contribution that ﬁsheries can make to poverty reduction. Although the precise impacts and direction of climate-driven change for particular ﬁsh stocks and ﬁsheries are uncertain, our analysis suggests they are likely to lead to either increased economic hardship or missed opportunities for development in countries that depend upon ﬁsheries but lack the capacity to adapt.

#### Extinction.

**Safina 95**—PhD in Ecology from Rutgers University, “World's Imperiled Fish (Global Fish Declines)” <http://www.seaweb.org/resources/articles/writings/safina6.php> Accessed date: 8-7-12 y2k

Fishing accounts for only about one percent of the global economy. But on a regional basis, marine fishing contributes enormously to human survival. Marine fisheries contribute more of the world's animal protein than beef, poultry, or any other kind of domesticated or wild animals. In Asia, more than one billion people rely on fish as their main source of animal protein. In Southeast Asia, more than 5 million people fish full time. In northern Chile, forty percent of the population fishes. In Newfoundland, nearly all of the people fished or serviced the fishing industry until the cod collapse in the early 1990s closed the fishery. Worldwide, about 200 million people depend on fishing for their livelihoods. Because fishing generally does not require land ownership and because access is generally open, it has been termed the "employer of last resort" in the developing world; an occupation to turn to when there are no options.

### Turns Ocean

#### Warming causes ocean collapse—extinction.

**McCarthy 11**—Michael McCarthy is Independent’s environment editor. “Oceans on brink of catastrophe: Marine life facing mass extinction 'within one human generation' / State of seas 'much worse than we thought', says global panel of scientists” 21 June 2011

Accessed date” 8-19-12 y2k

The world's oceans are faced with an unprecedented loss of species comparable to the great mass extinctions of prehistory, a major report suggests today. The seas are degenerating far faster than anyone has predicted, the report says, because of the cumulative impact of a number of severe individual stresses, ranging from climate warming and sea-water acidification, to widespread chemical pollution and gross overfishing. The coming together of these factors is now threatening the marine environment with a catastrophe "unprecedented in human history", according to the report, from a panel of leading marine scientists brought together in Oxford earlier this year by the International Programme on the State of the Ocean (IPSO) and the International Union for the Conservation of Nature (IUCN). The stark suggestion made by the panel is that the potential extinction of species, from large fish at one end of the scale to tiny corals at the other, is directly comparable to the five great mass extinctions in the geological record, during each of which much of the world's life died out. They range from the Ordovician-Silurian "event" of 450 million years ago, to the Cretaceous-Tertiary extinction of 65 million years ago, which is believed to have wiped out the dinosaurs. The worst of them, the event at the end of the Permian period, 251 million years ago, is thought to have eliminated 70 per cent of species on land and 96 per cent of all species in the sea. The panel of 27 scientists, who considered the latest research from all areas of marine science, concluded that a "combination of stressors is creating the conditions associated with every previous major extinction of species in Earth's history". They also concluded: \* The speed and rate of degeneration of the oceans is far faster than anyone has predicted; \* Many of the negative impacts identified are greater than the worst predictions; \* The first steps to globally significant extinction may have already begun. "The findings are shocking," said Dr Alex Rogers, professor of conservation biology at Oxford University and IPSO's scientific director. "As we considered the cumulative effect of what humankind does to the oceans, the implications became far worse than we had individually realised. "This is a very serious situation demanding unequivocal action at every level. We are looking at consequences for humankind that will impact in our lifetime, and worse, in the lifetime of our children and generations beyond that." Reviewing recent research, the panel of experts "found firm evidence" that the effects of climate change, coupled with other human-induced impacts such as overfishing and nutrient run-off from farming, have already caused a dramatic decline in ocean health. Not only are there severe declines in many fish species, to the point of commercial extinction in some cases, and an "unparalleled" rate of regional extinction of some habitat types, such as mangrove and seagrass meadows, but some whole marine ecosystems, such as coral reefs, may be gone within a generation. The report says: "Increasing hypoxia [low oxygen levels] and anoxia [absence of oxygen, known as ocean dead zones], combined with warming of the ocean and acidification, are the three factors which have been present in every mass extinction event in Earth's history. "There is strong scientific evidence that these three factors are combining in the ocean again, exacerbated by multiple severe stressors. The scientific panel concluded that a new extinction event was inevitable if the current trajectory of damage continues." The panel pointed to a number of indicators showing how serious the situation is. It said, for example, that a single mass coral bleaching event in 1998 killed 16 per cent of all the world's coral reefs, and pointed out that overfishing has reduced some commercial fish stocks and populations of "bycatch" (unintentionally caught) species by more than 90 per cent.

#### Global climate change devastates water resources—cause extinction.

**Sivakumar, 10**—Bellie is Associate Professor and ARC Future Fellow School of Civil and Environmental Engineering, The University of New South Wales, Australia. “Global climate change and its impacts on water resources planning and management: assessment and challenges” <http://www.springerlink.com.mutex.gmu.edu/content/a4g98886476n2h8g/fulltext.pdf> accessed date: 6-9-12 y2k

Population explosion and its many associated effects (e.g. urbanization, water pollution, deforestation) have already caused enormous stress on the world’s fresh water resources and, in turn, environment, health, and economy. According to latest World Health Organization estimates, about 900 million people still lack access to safe drinking water, about 2.5 billion people lack access to proper sanitation, millions of people die every year from water-related disasters and diseases, and economic losses in the order of billions of dollars occur due to water-related disasters. With the global climate change anticipated to have threatening consequences on our water resources and environment both at the global level and at local/regional levels (e.g. increases in the number and magnitude of ﬂoods and droughts, increases in sea levels), a general assessment is that the future state of our water resources will be a lot worse than it is now. The facts that over 300 rivers around the world are being shared by two or more nation states and that there are already numerous conﬂicts in the planning, development, and management of water resources in these basins further complicate matters for future water resources planning. In view of these, any sincere effort towards proper management of our future water resources and resolving potential future water-related conﬂicts will need to overcome many challenges. These challenges are both biophysical science-related and human science-related. The biophysical science challenges include: identiﬁcation of the actual causes of climate change, development of global climate models (GCMs) that can adequately incorporate these causes to generate dependable future climate projections at larger scales, formulation of appropriate techniques to downscale the GCM outputs to local conditions for hydrologic predictions, and reliable estimation of the associated uncertainties in all these. The human science challenges have social, political, economic, and environmental facets that often act in an interconnected manner; proper ‘communication’ of (or lack thereof) our climate-water ‘scientiﬁc’ research activities to fellow scientists and engineers, policy makers, economists, industrialists, farmers, and the public at large crucially contributes to these challenges. The present study is intended to review the current state of our water resources and the climate change problem and to detail the challenges in dealing with the potential impacts of climate change on our water resources The need for water for the sheer survival of humans, animals, and plants, and for the overall health of our ecosystems cannot be overstated.

### Turns Mid East

#### Climate change triggers Mid-East water wars—only internal link to destabilization.

**Pumphrey 8**—Carolyn Pumphrey has served as Coordinator for the Triangle Institute for Security Studies (TISS) since 2000 and is Special Faculty at North Carolina State University. “Global Climate Change: National Security Implications” May 2008

<http://www.strategicstudiesinstitute.army.mil/pdffiles/pub862.pdf> Accessed date: 8-19-12 y2k

The region that is usually most associated with water related conflict is the Middle East. In a famous quote, Boutros Boutros-Ghali said: “The next war in the Middle East will be fought over water and not politics.” A number of people have suggested—not without good reason—that water will drive future political conflicts in the Middle East. For example, how the waters of the Jordan River should be used and by whom has been very contentious for those riparians with a claim to its waters. That the issue is so highly contested is attested by its inclusion in the formal peace treaty between Jordan and Israel. Similarly, the Oslo Accords had a section on water and a section on the environment, as water is of vital economic importance to both Israelis and Palestinians. The Israelis and Palestinians agreed to negotiate a solution to share the mountain and coastal aquifers at the height of the Oslo Accords. This is unusual. In the aftermath of wars, there is usually a tendency to postpone dealing with really heated issues—and in the Middle East, water belongs to that category. Thus, it is rare to find water (and other environmental issues) directly included in a peace treaty. In both these cases, however, peacemakers clearly recognized that a resolution to the issue of water sharing was essential for maintaining the peace and rebuilding economies and societies. It is the scarcity of the resource, then, which is most closely associated in people’s minds with conflict and human insecurity. And, to tie this talk back to climate change—the primary theme of the conference—we do know that changes in precipitation, temperature, and carbon dioxide levels will affect the supply of and demand for renewable water resources. However, scarcity is only one part of the picture. There are other things which we need to factor in when assessing the role played by water in conflict, including the capacity of state institutions to adapt, the quality (as opposed to simply the quantity) of water, and demographics. The effects of climate change will vary because some states are more vulnerable and less able to adapt than others. Developing countries often do not have the institutional or technological capacity to plan for some of the changes that are most likely to come about. When we come up with models, it is important that we consider what kind of states we are looking at and think about whether or not we need to develop different planning strategies for different states—that is, the ability to implement our models might be contingent upon the particular institutional configuration within any one state. Water quality, moreover, must also be taken into consideration. There are 1.1 billion people worldwide that lack access to clean water, and 2.6 billion people that lack access to sanitation. Most of this population, again, is in Sub-Saharan Africa or in Asia. A society— even one likely to be dramatically affected by climate change—is not likely to give much thought to planning for this eventuality if most of its energies are focused on just trying to procure water to meet very basic human needs. Let us return to a consideration of the Middle East. This region is very arid. Countries with an annual availability of less than 1,000 cubic meters per person are considered to be water-scarce. Countries which have less than 500 cubic meters annually are considered absolute scarce. The Gaza strip, for example, is very water stressed. Each person has access to no more than about 320 cubic meters annually. The water resources—from the coastal aquifer—are shared between Israel and the Palestinian Authority. Here, water flows from Israel into the Gaza Strip—that is, towards the Mediterranean Sea. In the Gaza Strip, the water quality is extremely poor—the water salinity is very high. In addition to an overall water shortage, there is a significant shortage of safe drinking water. Add to this the fact that Gaza has one of the fastest growing populations in the world—about 4 percent growth rate per year. It is very common for individual women to have about seven children. Nearly 1.5 million Palestinians live on a very small piece of land, and the population is expected to reach 2.5 million in the next decade. Given the current consumption rates of water resources, the natural replenishment rate is far lower, which means that there is a growing water deficit and increasing magnitude of the water crisis. Attention must also be paid to demographics. Population growth is going to exacerbate the effects of climate change especially in regions like the Gaza Strip. The net effect of climate change on water availability will be limited in some regions. In other regions, climate change, compounded by population growth, 82 will actually have a much greater impact globally. This is especially true of regions such as North Africa and the Middle East. It is estimated that in the year 2025 about 3 billion people might be living in waterstressed areas. How will climate change affect the more long-term prospects of a post-conflict society We tend to focus on the conflicts themselves and how to bring them to an end. We do not devote enough time to thinking about the next stage. What happens after a conflict ends A recent finding suggests that many people will die following a civil war because they lack good drinking water and are forced to live in unsanitary conditions. 9 Far more people, in fact, die every year from poor water quality than they do in war. For example, 1.8 million children die from diarrhea and water-borne illnesses yearly. People also migrate during and after conflicts. This not only leads to the spread of infectious diseases but it puts added stress on strained water resources. Consider, for example, the case of Iraq today. Thousands of people are moving into Jordan. It is one of the few places they can go. They have also been trying to get into Syria. Water is already scarce in these areas. In Jordan, current supplies barely provide enough water for its rapidly growing population. Thus, the government could face mounting pressure to develop more rapidly its fossil (i.e., nonsustainable) groundwater. Consider also the case of Bangladesh. Here, if the models are correct, monsoons will be more intense, and flooding will also be more intense in the future. In that case, we are likely to see an unprecedented scale of migration within Bangladesh and into neighboring countries such as India. Groups are likely to compete for scarce resources and/or poor quality resources—another situation ripe for conflict

#### Climate change triggers mid-east instability.

**Brauch, 12**—Dr. Hans Gunter is Adj. Prof. at the Faculty of Political Science and Social Sciences, Free University of Berlin; fellow at the Institute on Environment and Human Security of the United Nations University (UNU-EHS); chairman of Peace Re­search and European Security Studies (AFES-PRESS). He was guest professor of international relations at the universities of Frankfurt on Main, Leipzig and Greifswald and at the teachers training college in Erfurt. From 1976-1989, he was research associate at Heidelberg and Stuttgart universities, a research fellow at Har­vard and Stanford University and he was also teaching at the universities of Darmstadt, Tübingen, Stuttgart and Heidelberg. “Policy Responses to Climate Change in the Mediterranean and MENA Region during the Anthropocene” <http://www.springerlink.com.mutex.gmu.edu/content/u406546152676j34/fulltext.pdf> accessed date: 6-9-12 y2k

According to the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC 2007, 2007a), the Middle East and North Africa (MENA) or the West Asia and North Africa (WANA) region will be severely affected by the physical effects of climate change such as i) high temperature increases, ii) significant decline in precipitation, and iii) projected sealevel rise, especially in the Nile delta and the low-lying coastal regions with high population density. These changes will directly affect agricultural production: rising evapotranspiration will contribute in most cases to falls in crop yields. This means that rapidly declining self-sufficiency in food caused by continued high population growth until 2050 – with a projected demographic transition prior to 2100 – will necessitate a significant increase in food (cereal) imports (Alexandratos 1995, 2003; FAO 2003). In several countries that are rich in fossil fuels, reserves of oil and gas are projected to decline or to be exhausted by 2050 (Brauch 1996, 1997c, 1997d, 1997e, 2001b). This raises basic economic challenges for many Mediterranean and MENA countries: how to pay for the increasing need of ‘virtual water’ (Allan 2003, 2009), and how to employ, house, and feed a rapidly growing population. These combined climatic, demographic, and economic challenges that many MENA countries will face by 2050 will affect not only the human security and survival of their citizens, but also the national security and stability of many countries; through both push and pull factors, the pressure on migration from some MENA countries to Europe, the Arab Gulf, North America, and even Australia may increase what many EU countries have considered an increasing internal security challenge (justice and home affairs), and one that has also been perceived as an international security issue.

### Turns South Asia

#### Climate change causes South-Asian conflict—their defense doesn’t apply.

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<http://www.strategicstudiesinstitute.army.mil/pdffiles/pub862.pdf> Accessed date: 8-19-12 y2k

At this point, let me put a concrete face on all of this by looking at a specific place. Let me examine what might happen in South Asia. A quarter of the world lives there. It is a region already facing water scarcity. Much of the fresh water comes from the mountain regions. If the glaciers continue to melt and snow patterns continue to change as we now see happening, people may, for a couple of decades, think that there is a lot of fresh water to be had. That is, there will be a temporary increase in many areas. But this will suddenly and quite abruptly change, and the people there will soon find that there is, in fact, a real scarcity of fresh water in an area that has one and a half billion people and in which there are two nuclear powers. Now there is disagreement in the academic literature over the extent to which competition over water leads to violent conflict rather than being worked out institutionally. But whatever the trends of the past, there is general agreement that climate change could create an entirely new type of water politics. South Asia is an area of considerable concern in this regard. If we look at water-related conflict in South Asia, there have been 10 incidents of violent conflict in the past 7 years. In the 53 years before, there were only three incidents. In other words, water-related violent conflict has increased 24-fold in the past 7 years. Fresh water is clearly the cause of grave concern throughout the subcontinent these days. Nepal, Pakistan, and Bangladesh worry that India is using its enormous power to negotiate a series of bilateral agreements that may not be on their best interests. So these countries are already very nervous about their prospects for fresh water over the next 20, 30, or 40 years, but they are not sure what to do. They are aware, however, that their fresh water supply could collapse dramatically, and they are concerned about how this will play out. Let me give you one example from my own research that I think is somewhat illustrative of what might lie in the not too distant future. Nepal, of course, is a fairly small country, 30 million people, but it is an extremely poor country, a country with a very low literacy rate and low rates in things like the United Nations (UN) Human Development Index, where it ranks at the very bottom of the planet’s 192 countries or close to the bottom. It is a country that has experimented with democracy. It has also experienced 10 years of extreme civil conflict that has driven the government to invest less and less in education and fresh water and sanitation and more and more in security. Nepal has a population that is very youthful, growing very rapidly, concentrated in a small number of areas. In short, it has all the conditions for violent conflict. It is transforming into a democracy, it is extremely impoverished, there is a high population density, and the big issue today is land. During 10 years of insurgency, the Maoists promised to redistribute land once they came into power, but since they joined the parliamentary system in November, they have backed away from this promise in two ways. Now they are saying, “Well, we will not redistribute any land of less than 10 hectares because that would be costly and disruptive, and, as for the formula for the rest, we have no idea what it should be, because we do not want to throw our economy into chaos by scaring away our local expertise and foreign investors.” So right now the politics of Nepal is defined by a tremendous expectation for land reform and very little clue of how to reform land ownership and access. What people are also starting to recognize is that land reform will need to be somehow integrated with access to fresh water. But fresh water is something that Nepal has been losing. It sees itself as a water rich country, but it has been losing a considerable amount to India. For example, in the 1950s people were encouraged to move to a wetland area of the Koshi River system to take pressure off the Kathmandu Valley. Half of this wetland was then leased to India because India has tremendous thirst for fresh water and needed it for irrigation in the north. Then the other half was turned into a protected site because the people were destroying it. What happened to the people Well, the people, feeling uncompensated, appear to have been mobilized by the Maoists, who promised to return the wetland to them as soon as they were in power. Now you have a situation in which millions of people are waiting to recover or gain access to water and land that they believe is rightfully theirs, and the Maoists have no idea how they are going to satisfy this expectation—67 one they cultivated. Meanwhile, Maoists have risen in power significantly in India in the past couple of years. These Naxalites are calling the Nepali Maoists soft because they are not dealing with the water and land issues that they promised they would deal with. This is a sort of pattern we are going to see more and more of. Ultimately there is no easy solution to the land and water issues in South Asia. Climate changes are likely to make these problems even more difficult to solve than in the past.

### Impact Cards

#### Warming causes extinction

Dr. David McCoy et al. 14, MD, Centre for International Health and Development, University College London, “Climate Change and Human Survival,” BRITISH MEDICAL JOURNAL v. 348, 4-2-14, doi: <http://dx.doi.org/10.1136/bmj.g2510>,

The Intergovernmental Panel on Climate Change (IPCC) has just published its report on the impacts of global warming. Building on its recent update of the physical science of global warming [1], the IPCC’s new report should leave the world in no doubt about the scale and immediacy of the threat to human survival, health, and well-being. The IPCC has already concluded that it is “virtually certain that human influence has warmed the global climate system” and that it is “extremely likely that more than half of the observed increase in global average surface temperature from 1951 to 2010” is anthropogenic [1]. Its new report outlines the future threats of further global warming: increased scarcity of food and fresh water; extreme weather events; rise in sea level; loss of biodiversity; areas becoming uninhabitable; and mass human migration, conflict and violence. Leaked drafts talk of hundreds of millions displaced in a little over 80 years. This month, the American Association for the Advancement of Science (AAAS) added its voice: “the well being of people of all nations [is] at risk.” [2] Such comments reaffirm the conclusions of the Lancet/UCL Commission: that climate change is “the greatest threat to human health of the 21st century.” [3] The changes seen so far—massive arctic ice loss and extreme weather events, for example—have resulted from an estimated average temperature rise of 0.89°C since 1901. Further changes will depend on how much we continue to heat the planet. The release of just another 275 gigatonnes of carbon dioxide would probably commit us to a temperature rise of at least 2°C—an amount that could be emitted in less than eight years. [4] “Business as usual” will increase carbon dioxide concentrations from the current level of 400 parts per million (ppm), which is a 40% increase from 280 ppm 150 years ago, to 936 ppm by 2100, with a 50:50 chance that this will deliver global mean temperature rises of more than 4°C. It is now widely understood that such a rise is “incompatible with an organised global community.” [5]. The IPCC warns of “tipping points” in the Earth’s system, which, if crossed, could lead to a catastrophic collapse of interlinked human and natural systems. The AAAS concludes that there is now a “real chance of abrupt, unpredictable and potentially irreversible changes with highly damaging impacts on people around the globe.” [2] And this week a report from the World Meteorological Office (WMO) confirmed that extreme weather events are accelerating. WMO secretary general Michel Jarraud said, “There is no standstill in global warming . . . The laws of physics are non-negotiable.” [6]

#### Warming is real, anthropogenic, and causes extinction

Richard Schiffman 13, environmental writer @ The Atlantic citing the Fifth Intergovernmental Panel on Climate Change, “What Leading Scientists Want You to Know About Today's Frightening Climate Report,” The Atlantic, 9/27, http://www.theatlantic.com/technology/archive/2013/09/leading-scientists-weigh-in-on-the-mother-of-all-climate-reports/280045/

The polar icecaps are melting faster than we thought they would; seas are rising faster than we thought they would; extreme weather events are increasing. Have a nice day! That’s a less than scientifically rigorous summary of the findings of the Fifth Intergovernmental Panel on Climate Change (IPCC) report released this morning in Stockholm.¶ Appearing exhausted after a nearly two sleepless days fine-tuning the language of the report, co-chair Thomas Stocker called climate change “the greatest challenge of our time," adding that “each of the last three decades has been successively warmer than the past,” and that this trend is likely to continue into the foreseeable future.¶ Pledging further action to cut carbon dioxide (CO2) emissions, U.S. Secretary of State John Kerry said, "This isn’t a run of the mill report to be dumped in a filing cabinet. This isn’t a political document produced by politicians... It’s science."¶ And that science needs to be communicated to the public, loudly and clearly. I canvassed leading climate researchers for their take on the findings of the vastly influential IPCC report. What headline would they put on the news? What do they hope people hear about this report?¶ When I asked him for his headline, Michael Mann, the Director of the Earth Systems Science Center at Penn State (a former IPCC author himself) suggested: "Jury In: Climate Change Real, Caused by Us, and a Threat We Must Deal With."¶ Ted Scambos, a glaciologist and head scientist of the National Snow and Ice Data Center (NSIDC) based in Boulder would lead with: "IPCC 2013, Similar Forecasts, Better Certainty." While the report, which is issued every six to seven years, offers no radically new or alarming news, Scambos told me, it puts an exclamation point on what we already know, and refines our evolving understanding of global warming.¶ The IPCC, the indisputable rock star of UN documents, serves as the basis for global climate negotiations, like the ones that took place in Kyoto, Rio, and, more recently, Copenhagen. (The next big international climate meeting is scheduled for 2015 in Paris.) It is also arguably the most elaborately vetted and exhaustively researched scientific paper in existence. Founded in 1988 by the United Nations and the World Meteorological Organization, the IPCC represents the distilled wisdom of over 600 climate researchers in 32 countries on changes in the Earth’s atmosphere, ice and seas. It endeavors to answer the late New York mayor Ed Koch’s famous question “How am I doing?” for all of us. The answer, which won’t surprise anyone who has been following the climate change story, is not very well at all. ¶ It is now 95 percent likely that human spewed heat-trapping gases — rather than natural variability — are the main cause of climate change, according to today’s report. In 2007 the IPCC’s confidence level was 90 percent, and in 2001 it was 66 percent, and just over 50 percent in 1995. ¶ What’s more, things are getting worse more quickly than almost anyone thought would happen a few years back.¶ “If you look at the early IPCC predictions back from 1990 and what has taken place since, climate change is proceeding faster than we expected,” Mann told me by email. Mann helped develop the famous hockey-stick graph, which Al Gore used in his film “An Inconvenient Truth” to dramatize the sharp rise in temperatures in recent times. ¶ Mann cites the decline of Arctic sea ice to explain : “Given the current trajectory, we're on track for ice-free summer conditions in the Arctic in a matter of a decade or two... There is a similar story with the continental ice sheets, which are losing ice — and contributing to sea level rise — at a faster rate than the [earlier IPCC] models had predicted.”¶ But there is a lot that we still don’t understand. Reuters noted in a sneak preview of IPCC draft which was leaked in August that, while the broad global trends are clear, climate scientists were “finding it harder than expected to predict the impact in specific regions in coming decades.”¶ From year to year, the world’s hotspots are not consistent, but move erratically around the globe. The same has been true of heat waves, mega-storms and catastrophic floods, like the recent ones that ravaged the Colorado Front Range. There is broad agreement that climate change is increasing the severity of extreme weather events, but we’re not yet able to predict where and when these will show up. ¶ “It is like watching a pot boil,” Danish astrophysicist and climate scientist Peter Thejll told me. “We understand why it boils but cannot predict where the next bubble will be.”¶ There is also uncertainty about an apparent slowdown over the last decade in the rate of air temperature increase. While some critics claim that global warming has “stalled,” others point out that, when rising ocean temperatures are factored in, the Earth is actually gaining heat faster than previously anticipated.¶ “Temperatures measured over the short term are just one parameter,” said Dr Tim Barnett of the Scripps Institute of Oceanography in an interview. “There are far more critical things going on; the acidification of the ocean is happening a lot faster than anybody thought that it would, it’s sucking up more CO2, plankton, the basic food chain of the planet, are dying, it’s such a hugely important signal. Why aren’t people using that as a measure of what is going on?”¶ Barnett thinks that recent increases in volcanic activity, which spews smog-forming aerosols into the air that deflect solar radiation and cool the atmosphere, might help account for the temporary slowing of global temperature rise. But he says we shouldn’t let short term fluctuations cause us to lose sight of the big picture.¶ The dispute over temperatures underscores just how formidable the IPCC’s task of modeling the complexity of climate change is. Issued in three parts (the next two installments are due out in the spring), the full version of the IPCC will end up several times the length of Leo Tolstoy’s epic War and Peace. Yet every last word of the U.N. document needs to be signed off on by all of the nations on earth. ¶ “I do not know of any other area of any complexity and importance at all where there is unanimous agreement... and the statements so strong,” Mike MacCracken, Chief Scientist for Climate Change Programs, Climate Institute in Washington, D.C. told me in an email. “What IPCC has achieved is remarkable (and why it merited the Nobel Peace Prize granted in 2007).”¶ Not surprisingly, the IPCC’s conclusions tend to be “conservative by design,” Ken Caldeira, an atmospheric scientist with the Carnegie Institution’s Department of Global Ecology told me: “The IPCC is not supposed to represent the controversial forefront of climate science. It is supposed to represents what nearly all scientists agree on, and it does that quite effectively.”¶ Nevertheless, even these understated findings are inevitably controversial. Roger Pielke Jr., the Director of the Center for Science and Technology Policy Research at the University of Colorado, Boulder suggested a headline that focuses on the cat fight that today’s report is sure to revive: "Fresh Red Meat Offered Up in the Climate Debate, Activists and Skeptics Continue Fighting Over It." Pielke should know. A critic of Al Gore, who has called his own detractors "climate McCarthyists," Pielke has been a lightning rod for the political controversy which continues to swirl around the question of global warming, and what, if anything, we should do about it. ¶ The public’s skepticism of climate change took a dive after Hurricane Sandy. Fifty-four percent of Americans are now saying that the effects of global warming have already begun. But 41 percent surveyed in the same Gallup poll believe news about global warming is generally exaggerated, and there is a smaller but highly passionate minority that continues to believe the whole thing is a hoax. ¶ For most climate experts, however, the battle is long over — at least when it comes to the science. What remains in dispute is not whether climate change is happening, but how fast things are going to get worse.¶ There are some possibilities that are deliberately left out of the IPCC projections, because we simply don’t have enough data yet to model them. Jason Box, a visiting scholar at the Byrd Polar Research Center told me in an email interview that: “The scary elephant in the closet is terrestrial and oceanic methane release triggered by warming.” The IPCC projections don’t include the possibility — some scientists say likelihood — that huge quantities of methane (a greenhouse gas thirty times as potent as CO2) will eventually be released from thawing permafrost and undersea methane hydrate reserves. Box said that the threshhold “when humans lose control of potential management of the problem, may be sooner than expected.”¶ Box, whose work has been instrumental in documenting the rapid deterioration of the Greenland ice sheet, also believes that the latest IPCC predictions (of a maximum just under three foot ocean rise by the end of the century) may turn out to be wildly optimistic, if the Greenland ice sheet breaks up. “We are heading into uncharted territory” he said. “We are creating a different climate than the Earth has ever seen.” ¶ The head of the IPCC, Rajendra Pachauri, speaks for the scientific consensus when he says that time is fast running out to avoid the catastrophic collapse of the natural systems on which human life depends. What he recently told a group of climate scientist could be the most chilling headline of all for the U.N. report: ¶ "We have five minutes before midnight."

#### Extinction

Don Flournoy 12, Citing Feng Hsu, PhD NASA Scientist @ the Goddard Space Flight Center and Don is a PhD and MA from UT, former Dean of the University College @ Ohio University, former Associate Dean at SUNY and Case Institute of Technology, Former Manager for University/Industry Experiments for the NASA ACTS Satellite, currently Professor of Telecommunications @ Scripps College of Communications, Ohio University, “Solar Power Satellites,” January 2012, Springer Briefs in Space Development, p. 10-11

In the Online Journal of Space Communication , Dr. Feng Hsu, a NASA scientist at Goddard Space Flight Center, a research center in the forefront of science of space and Earth, writes, “The evidence of global warming is alarming,” noting the potential for a catastrophic planetary climate change is real and troubling (Hsu 2010 ) . Hsu and his NASA colleagues were engaged in monitoring and analyzing climate changes on a global scale, through which they received first-hand scientific information and data relating to global warming issues, including the dynamics of polar ice cap melting. After discussing this research with colleagues who were world experts on the subject, he wrote: I now have no doubt global temperatures are rising, and that global warming is a serious problem confronting all of humanity. No matter whether these trends are due to human interference or to the cosmic cycling of our solar system, there are two basic facts that are crystal clear: (a) there is overwhelming scientific evidence showing positive correlations between the level of CO2 concentrations in Earth’s atmosphere with respect to the historical fluctuations of global temperature changes; and (b) the overwhelming majority of the world’s scientific community is in agreement about the risks of a potential catastrophic global climate change. That is, if we humans continue to ignore this problem and do nothing, if we continue dumping huge quantities of greenhouse gases into Earth’s biosphere, humanity will be at dire risk (Hsu 2010 ) . As a technology risk assessment expert, Hsu says he can show with some confidence that the planet will face more risk doing nothing to curb its fossil-based energy addictions than it will in making a fundamental shift in its energy supply. “This,” he writes, “is because the risks of a catastrophic anthropogenic climate change can be potentially the extinction of human species, a risk that is simply too high for us to take any chances” (Hsu 2010 ).

### Real

#### Warming real and outweighs---postdating ev

Justin Gillis 11/2, [www.nytimes.com/2014/11/03/world/europe/global-warming-un-intergovernmental-panel-on-climate-change.html](http://www.nytimes.com/2014/11/03/world/europe/global-warming-un-intergovernmental-panel-on-climate-change.html" \t "_blank)

COPENHAGEN — The gathering risks of climate change are so profound that they could stall or even reverse generations of progress against poverty and hunger if greenhouse emissions continue at a runaway pace, according to a major new United Nations report.¶ Despite growing efforts in many countries to tackle the problem, the global situation is becoming more acute as developing countries join the West in burning huge amounts of fossil fuels, the Intergovernmental Panel on Climate Change said here on Sunday.¶ Failure to reduce emissions, the group of scientists and other experts found, could threaten society with food shortages, refugee crises, the flooding of major cities and entireisland nations, mass extinction of plants and animals, and a climate so drastically altered it might become dangerous for people to work or play outside during the hottest times of the year.¶ “Continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems,” the report found.¶ In the starkest language it has ever used, the expert panel made clear how far society remains from having any serious policy to limit global warming.¶ Doing so would require leaving the vast majority of the world’s reserves of fossil fuels in the ground or, alternatively, developing methods to capture and bury the emissions resulting from their use, the group said.¶ If governments are to meet their own stated goal of limiting the warming of the planet to no more than 3.6 degrees Fahrenheit, or 2 degrees Celsius, above the preindustrial level, they must restrict emissions from additional fossil-fuel burning to about 1 trillion tons of carbon dioxide, the panel said. At current growth rates, that budget is likely to be exhausted in something like 30 years, possibly less.¶ Yet energy companies have booked coal and petroleum reserves equal to several times that amount, and they are spending some $600 billion a year to find more. Utilities and oil companies continue to build coal-fired power plants and refineries, and governments are spending another $600 billion or so directly subsidizing the consumption of fossil fuels.¶ By contrast, the report found, less than $400 billion a year is being spent around the world to reduce emissions or otherwise cope with climate change. That is a small fraction of the revenue spent on fossil fuels — it is less, for example, than the revenue of a single American oil company, ExxonMobil.¶ The new report comes just a month before international delegates convene in Lima, Peru, to devise a new global agreement to limit emissions, and it makes clear the urgency of their task.¶ Appearing Sunday morning at a news conference in Copenhagen to unveil the report, the United Nations secretary general, Ban Ki-moon, appealed for strong action in Lima.¶ “Science has spoken. There is no ambiguity in their message,” Mr. Ban said. “Leaders must act. Time is not on our side.”¶ Yet there has been no sign that national leaders are willing to discuss allocating the trillion-ton emissions budget among countries, an approach that would confront the problem head-on, but also raise deep questions of fairness. To the contrary, they are moving toward a relatively weak agreement that would essentially let each country decide for itself how much effort to put into limiting global warming, and even that document would not take effect until 2020.¶ “If they choose not to talk about the carbon budget, they’re choosing not to address the problem of climate change,” said Myles R. Allen, a climate scientist at Oxford University in Britain who helped write the new report. “They might as well not bother to turn up for these meetings.”¶ The Intergovernmental Panel on Climate Change is a scientific body appointed by the world’s governments to advise them on the causes and effects of global warming, and potential solutions. The group, along with Al Gore, was awarded the Nobel Peace Prize in 2007 for its efforts to call attention to the climate crisis.¶ The new report is a 175-page synopsis of a much longer series of reports that the panel has issued over the past year. It is the final step in a five-year effort by the body to analyze a vast archive of published climate research.¶ It is the fifth such report from the group since 1990, each finding greater certainty that the climate is warming and that human activities are the primary cause.¶ “Human influence has been detected in warming of the atmosphere and the ocean, in changes in the global water cycle, in reductions in snow and ice, and in global mean sea-level rise; and it is extremely likely to have been the dominant cause of the observed warming since the mid-20th century,” the report said.¶ A core finding of the new report is that climate change is no longer a distant threat, but is being felt all over the world. “It’s here and now,” Rajendra K. Pachauri, the chairman of the panel, said in an interview. “It’s not something in the future.”¶ The group cited mass die-offs of forests, such as those killed by heat-loving beetles in the American West; the melting of land ice virtually everywhere in the world; an accelerating rise of the seas that is leading to increased coastal flooding; and heat waves that have devastated crops and killed tens of thousands of people.¶ The report contained the group’s most explicit warning yet about the food supply, saying that climate change had already become a small drag on overall global production, and could become a far larger one if emissions continued unchecked.¶ A related finding is that climate change poses serious risks to basic human progress, in areas such as alleviating poverty. Under the worst-case scenarios, factors like high food prices and intensified weather disasters would most likely leave poor people worse off. In fact, the report said, that has already happened to a degree.

#### Warming is anthropogenic and occurring now

**Rahmstorf 8**—Stefan Rahmstorf is Professor of Physics of the Oceans, Potsdam University, Head of Earth System Analysis, PIK , Fellow of the American Geophysical Union, Honorary Fellow of the University of Wales/Bangor , Member of the Academia Europaea, Member of the German Advisory Council on Global Change (WBGU), “Global Warming: Looking Beyond Kyoto”

It is time to turn to statement B: human activities are altering the climate. This can be broken into two parts. The first is as follows: global climate is warming. This is by now a generally undisputed point (except by novelist Michael Crichton), so we deal with it only briefly. The two leading compilations of data measured with thermometers are shown in figure 3-3, that of the National Aeronautics and Space Administration (NASA) and that of the British Hadley Centre for Climate Change. Although they differ in the details, due to the inclusion of different data sets and use of different spatial averaging and quality control procedures, they both show a consistent picture, with a global mean warming of 0.8°C since the late nineteenth century. Temperatures over the past ten years clearly were the warmest since measured records have been available. The year 1998 sticks out well above the longterm trend due to the occurrence of a major El Nino event that year (the last El Nino so far and one of the strongest on record). These events are examples of the largest natural climate variations on multiyear time scales and, by releasing heat from the ocean, generally cause positive anomalies in global mean temperature. It is remarkable that the year 2005 rivaled the heat of 1998 even though no El Nino event occurred that year. (A bizarre curiosity, perhaps worth mentioning, is that several prominent "climate skeptics" recently used the extreme year 1998 to claim in the media that global warming had ended. In Lindzen's words, "Indeed, the absence of any record breakers during the past seven years is statistical evidence that temperatures are not increasing.")33 In addition to the surface measurements, the more recent portion of the global warming trend (since 1979) is also documented by satellite data. It is not straightforward to derive a reliable surface temperature trend from satellites, as they measure radiation coming from throughout the atmosphere (not just near the surface), including the stratosphere, which has strongly cooled, and the records are not homogeneous' due to the short life span of individual satellites, the problem of orbital decay, observations at different times of day, and drifts in instrument calibration.' Current analyses of these satellite data show trends that are fully consistent with surface measurements and model simulations." If no reliable temperature measurements existed, could we be sure that the climate is warming? The "canaries in the coal mine" of climate change (as glaciologist Lonnie Thompson puts it) ~are mountain glaciers. We know, both from old photographs and from the position of the terminal moraines heaped up by the flowing ice, that mountain glaciers have been in retreat all over the world during the past century. There are precious few exceptions, and they are associated with a strong increase in precipitation or local cooling.36 I have inspected examples of shrinking glaciers myself in field trips to Switzerland, Norway, and New Zealand. As glaciers respond sensitively to temperature changes, data on the extent of glaciers have been used to reconstruct a history of Northern Hemisphere temperature over the past four centuries (see figure 3-4). Cores drilled in tropical glaciers show signs of recent melting that is unprecedented at least throughout the Holocene-the past 10,000 years. Another powerful sign of warming, visible clearly from satellites, is the shrinking Arctic sea ice cover (figure 3-5), which has declined 20 percent since satellite observations began in 1979. While climate clearly became warmer in the twentieth century, much discussion particularly in the popular media has focused on the question of how "unusual" this warming is in a longer-term context. While this is an interesting question, it has often been mixed incorrectly with the question of causation. Scientifically, how unusual recent warming is-say, compared to the past millennium-in itself contains little information about its cause. Even a highly unusual warming could have a natural cause (for example, an exceptional increase in solar activity). And even a warming within the bounds of past natural variations could have a predominantly anthropogenic cause. I come to the question of causation shortly, after briefly visiting the evidence for past natural climate variations. Records from the time before systematic temperature measurements were collected are based on "proxy data," coming from tree rings, ice cores, corals, and other sources. These proxy data are generally linked to local temperatures in some way, but they may be influenced by other parameters as well (for example, precipitation), they may have a seasonal bias (for example, the growth season for tree rings), and high-quality long records are difficult to obtain and therefore few in number and geographic coverage. Therefore, there is still substantial uncertainty in the evolution of past global or hemispheric temperatures. (Comparing only local or regional temperature; as in Europe, is of limited value for our purposes,' as regional variations can be much larger than global ones and can have many regional causes, unrelated to global-scale forcing and climate change.) The first quantitative reconstruction for the Northern Hemisphere temperature of the past millennium, including an error estimation, was presented by Mann, Bradley, and Hughes and rightly highlighted in the 2001 IPCC report as one of the major new findings since its 1995 report; it is shown in figure 3\_6.39 The analysis suggests that, despite the large error bars, twentieth-century warming is indeed highly unusual and probably was unprecedented during the past millennium. This result, presumably because of its symbolic power, has attracted much criticism, to some extent in scientific journals, but even more so in the popular media. The hockey stick-shaped curve became a symbol for the IPCC, .and criticizing this particular data analysis became an avenue for some to question the credibility of the IPCC. Three important things have been overlooked in much of the media coverage. First, even if the scientific critics had been right, this would not have called into question the very cautious conclusion drawn by the IPCC from the reconstruction by Mann, Bradley, and Hughes: "New analyses of proxy data for the Northern Hemisphere indicate that the increase in temperature in the twentieth century is likely to have been the largest of any century during the past 1,000 years." This conclusion has since been supported further by every single one of close to a dozen new reconstructions (two of which are shown in figure 3-6). Second, by far the most serious scientific criticism raised against Mann, Hughes, and Bradley was simply based on a mistake. 40 The prominent paper of von Storch and others, which claimed (based on a model test) that the method of Mann, Bradley, and Hughes systematically underestimated variability, "was [itself] based on incorrect implementation of the reconstruction procedure."41 With correct implementation, climate field reconstruction procedures such as the one used by Mann, Bradley, and Hughes have been shown to perform well in similar model tests. Third, whether their reconstruction is accurate or not has no bearing on policy. If their analysis underestimated past natural climate variability, this would certainly not argue for a smaller climate sensitivity and thus a lesser concern about the consequences of our emissions. Some have argued that, in contrast, it would point to a larger climate sensitivity. While this is a valid point in principle, it does not apply in practice to the climate sensitivity estimates discussed herein or to the range given by IPCC, since these did not use the reconstruction of Mann, Hughes, and Bradley or any other proxy records of the past millennium. Media claims that "a pillar of the Kyoto Protocol" had been called into question were therefore misinformed. As an aside, the protocol was agreed in 1997, before the reconstruction in question even existed. The overheated public debate on this topic has, at least, helped to attract more researchers and funding to this area of paleoclimatology; its methodology has advanced significantly, and a number of new reconstructions have been presented in recent years. While the science has moved forward, the first seminal reconstruction by Mann, Hughes, and Bradley has held up remarkably well, with its main features reproduced by more recent work. Further progress probably will require substantial amounts of new proxy data, rather than further refinement of the statistical techniques pioneered by Mann, Hughes, and Bradley. Developing these data sets will require time and substantial effort. It is time to address the final statement: most of the observed warming over the past fifty years is anthropogenic. A large number of studies exist that have taken different approaches to analyze this issue, which is generally called the "attribution problem." I do not discuss the exact share of the anthropogenic contribution (although this is an interesting question). By "most" I imply mean "more than 50 percent.” The first and crucial piece of evidence is, of course, that the magnitude of the warming is what is expected from the anthropogenic perturbation of the radiation balance, so anthropogenic forcing is able to explain all of the temperature rise. As discussed here, the rise in greenhouse gases alone corresponds to 2.6 W/tn2 of forcing. This by itself, after subtraction of the observed 0'.6 W/m2 of ocean heat uptake, would Cause 1.6°C of warming since preindustrial times for medium climate sensitivity (3"C). With a current "best guess'; aerosol forcing of 1 W/m2, the expected warming is O.8°c. The point here is not that it is possible to obtain the 'exact observed number-this is fortuitous because the amount of aerosol' forcing is still very' uncertain-but that the expected magnitude is roughly right. There can be little doubt that the anthropogenic forcing is large enough to explain most of the warming. Depending on aerosol forcing and climate sensitivity, it could explain a large fraction of the warming, or all of it, or even more warming than has been observed (leaving room for natural processes to counteract some of the warming). The second important piece of evidence is clear: there is no viable alternative explanation. In the scientific literature, no serious alternative hypothesis has been proposed to explain the observed global warming. Other possible causes, such as solar activity, volcanic activity, cosmic rays, or orbital cycles, are well observed, but they do not show trends capable of explaining the observed warming. Since 1978, solar irradiance has been measured directly from satellites and shows the well-known eleven-year solar cycle, but no trend. There are various estimates of solar variability before this time, based on sunspot numbers, solar cycle length, the geomagnetic AA index, neutron monitor data, and, carbon-14 data. These indicate that solar activity probably increased somewhat up to 1940. While there is disagreement about the variation in previous centuries, different authors agree that solar activity did not significantly increase during the last sixty-five years. Therefore, this cannot explain the warming, and neither can any of the other factors mentioned. Models driven by natural factors only, leaving the anthropogenic forcing aside, show a cooling in the second half of the twentieth century (for an example, See figure 2-2, panel a, in chapter 2 of this volume). The trend in the sum of natural forcings is downward. The only way out would be either some as yet undiscovered unknown forcing or a warming trend that arises by chance from an unforced internal variability in the climate system. The latter cannot be completely ruled out, but has to be considered highly unlikely. No evidence in the observed record, proxy data, or current models suggest that such internal variability could cause a sustained trend of global warming of the observed magnitude. As discussed twentieth century warming is unprecedented over the past 1,000 years, (or even 2,000 years, as the few longer reconstructions available now suggest), which does not 'support the idea of large internal fluctuations. Also, those past variations correlate well with past forcing (solar variability, volcanic activity) and thus appear to be largely forced rather than due to unforced internal variability." And indeed, it would be difficult for a large and sustained unforced variability to satisfy the fundamental physical law of energy conservation. Natural internal variability generally shifts heat around different parts of the climate system-for example, the large El Nino event of 1998, which warmed, the atmosphere by releasing heat stored in the ocean. This mechanism implies that the ocean heat content drops as the atmosphere warms. For past decades, as discussed, we observed the atmosphere warming and the ocean heat content increasing, which rules out heat release from the ocean as a cause of surface warming. The heat content of the whole climate system is increasing, and there is no plausible source of this heat other than the heat trapped by greenhouse gases. ' A completely different approach to attribution is to analyze the spatial patterns of climate change. This is done in so-called fingerprint studies, which associate particular patterns or "fingerprints" with different forcings. It is plausible that the pattern of a solar-forced climate change differs from the pattern of a change caused by greenhouse gases. For example, a characteristic of greenhouse gases is that heat is trapped closer to the Earth's surface and that, unlike solar variability, greenhouse gases tend to warm more in winter, and at night. Such studies have used different data sets and have been performed by different groups of researchers with different statistical methods. They consistently conclude that the observed spatial pattern of warming can only be explained by greenhouse gases.49 Overall, it has to be considered, highly likely' that the observed warming is indeed predominantly due to the human-caused increase in greenhouse gases. ' This paper discussed the evidence for the anthropogenic increase in atmospheric CO2 concentration and the effect of CO2 on climate, finding that this anthropogenic increase is proven beyond reasonable doubt and that a mass of evidence points to a CO2 effect on climate of 3C ± 1.59C global-warming for a doubling of concentration. (This is, the classic IPCC range; my personal assessment is that, in-the light of new studies since the IPCC Third Assessment Report, the uncertainty range can now be narrowed somewhat to 3°C ± 1.0C) This is based on consistent results from theory, models, and data analysis, and, even in the absence-of any computer models, the same result would still hold based on physics and on data from climate history alone. Considering the plethora of consistent evidence, the chance that these conclusions are wrong has to be considered minute. If the preceding is accepted, then it follows logically and incontrovertibly that a further increase in CO2 concentration will lead to further warming. The magnitude of our emissions depends on human behavior, but the climatic response to various emissions scenarios can be computed from the information presented here. The result is the famous range of future global temperature scenarios shown in figure 3\_6.50 Two additional steps are involved in these computations: the consideration of anthropogenic forcings other than CO2 (for example, other greenhouse gases and aerosols) and the computation of concentrations from the emissions. Other gases are not discussed here, although they are important to get quantitatively accurate results. CO2 is the largest and most important forcing. Concerning concentrations, the scenarios shown basically assume that ocean and biosphere take up a similar share of our emitted CO2 as in the past. This could turn out to be an optimistic assumption; some models indicate the possibility of a positive feedback, with the biosphere turning into a carbon source rather than a sink under growing climatic stress. It is clear that even in the more optimistic of the shown (non-mitigation) scenarios, global temperature would rise by 2-3°C above its preindustrial level by the end of this century. Even for a paleoclimatologist like myself, this is an extraordinarily high temperature, which is very likely unprecedented in at least the past 100,000 years. As far as the data show, we would have to go back about 3 million years, to the Pliocene, for comparable temperatures. The rate of this warming (which is important for the ability of ecosystems to cope) is also highly unusual and unprecedented probably for an even longer time. The last major global warming trend occurred when the last great Ice Age ended between 15,000 and 10,000 years ago: this was a warming of about 5°C over 5,000 years, that is, a rate of only 0.1 °C per century. 52 The expected magnitude and rate of planetary warming is highly likely to come with major risk and impacts in terms of sea level rise (Pliocene sea level was 25-35 meters higher than now due to smaller Greenland and Antarctic ice sheets), extreme events (for example, hurricane activity is expected to increase in a warmer climate), and ecosystem loss. The second part of this paper examined the evidence for the current warming of the planet and discussed what is known about its causes. This part showed that global warming is already a measured and well-established fact, not a theory. Many different lines of evidence consistently show that most of the observed warming of the past fifty years was caused by human activity. Above all, this warming is exactly what would be expected given the anthropogenic rise in greenhouse gases, and no viable alternative explanation for this warming has been proposed in the scientific literature. Taken together., the very strong evidence accumulated from thousands of independent studies, has over the past decades convinced virtually every climatologist around the world (many of whom were initially quite skeptical, including myself) that anthropogenic global warming is a reality with which we need to deal.

#### Warming is anthropogenic—climate calculation proves.

**Farley** **8**—John, a professor of physics and astronomy at the UNLV, “The Scientific Case for Modern Anthropogenic Global Warming” 7-1-8 <http://monthlyreview.org/2008/07/01/the-scientific-case-for-modern-anthropogenic-global-warming> accessed date: 5-24-12 y2k

The greenhouse effect warms the earth. The warming power of the sun is mostly in the visible and ultraviolet region of the spectrum. The surface of the earth re-radiates solar energy back toward space in the form of infrared light. Because of greenhouse gases in it, the atmosphere is transparent to the visible light coming from the sun, but opaque at many wavelengths in the infrared band, resulting in the trapping of thermal energy and the warming of the earth. This is the so-called greenhouse effect, which has been known for two centuries.[4](http://monthlyreview.org/2008/07/01/the-scientific-case-for-modern-anthropogenic-global-warming#en4) The first scientist to realize that the atmosphere warms the earth may have been the French mathematician and physicist Joseph Fourier in the 1820s (who should not be confused with the journalist and utopian socialist Charles Fourier). The primary greenhouse gases are water vapor, CO2, and methane (natural gas, CH4). I don’t know any scientist who doubts that the greenhouse effect is a real effect. Too many people fail to appreciate how large the greenhouse effect really is. A simple calculation based on the Stefan-Boltzmann law shows that if there were no greenhouse gases in the atmosphere (and if nothing else about the earth changed as a result of removing the greenhouse gases), the average surface temperature of the earth would be –18˚C (–1˚F), which is below the freezing point of water.[5](http://monthlyreview.org/2008/07/01/the-scientific-case-for-modern-anthropogenic-global-warming#en5)

The actual observed average surface temperature of the earth is 15˚C (59˚F). Thus the greenhouse effect raises the earth’s surface temperature by 33˚C (60˚F).

Thus the greenhouse effect raises the earth’s surface temperature by 33˚C (60˚F). In this sense, global warming has already happened! Not only is the greenhouse effect a real effect, it is a large effect. The greenhouse effect is intensifying as a result of the greenhouse gases building up in the atmosphere due primarily to CO2 from the burning of fossil fuels (coal, oil, and natural gas) and deforestation. Accurate data by direct experimental measurement was not available until 1959, when the geochemist C. D. Keeling started taking data at Mauna Loa, Hawaii. That measurement program has continued up to the present. The data show a seasonal cycle that matches the growing season in the Northern Hemisphere, with a maximum in May and a minimum in October.[7](http://monthlyreview.org/2008/07/01/the-scientific-case-for-modern-anthropogenic-global-warming#en7) Most significant is a long-term upward trend: from 315 ppm in 1958 to 387 ppm in 2008. While other aspects of global warming have been controversial, nobody has ever doubted the data from this measurement program. The data are rock solid. Several research teams have measured the atmospheric CO2concentrations and the data from the different researchers are in agreement.

#### Trending series and robust statistics prove—warming is anthropogenic.

**Estrada et al 12**— Francisco Estrada, Centro de Ciencias de la Atmósfera, Universidad Nacional Autónoma de México,

Ciudad Universitaria, Pierre Perron, Department of Economics, Boston University. Benjamín Martínez, Institute for Environmental Studies, Vrije Universiteit, Amsterdam, Netherlands. “Statistical evidence about human influence on the climate system” <http://people.bu.edu/perron/papers/EPM_2012.pdf> accessed date: 7-16-12 y2k

We use recent methods for the analysis of time series data, in particular related to breaks in trends, to establish that human factors are the main contributors to the secular movements in observed global and hemispheric temperatures series. The most important feature documented is a marked increase in the growth rates of temperatures (purged from the Atlantic Multidecadal Oscillation) and anthropogenic greenhouse gases occurring for all series around 1955, which marks the start of sustained global warming. Also evidence shows that human interventions effectively slowed global warming in two occasions. The Montreal Protocol and the technological change in agricultural production in Asia are major drivers behind the slowdown of the warming since 1994, providing evidence about the effectiveness of reducing emissions of greenhouse gases other than CO2 for mitigating climate change in the shorter term. The largest socioeconomic disruptions, the two World Wars and the Great Crash, are shown to have contributed to the cooling in the mid 20th century. While other radiative factors have modulated their effect, the greenhouse gases defined the secular movement in both the total radiative forcing and the global and hemispheric temperature series. Deviations from this anthropogenic trend are shown to have transitory effects

Two main statistical approaches are used for investigating the attribution of climate change: the optimal fingerprinting method which consists in searching for spatial and/or temporal patterns consistent with the anthropogenic forcing signal that are common in both observed and externally forced simulations of climate variables, and the cointegration framework that permits testing for the attribution of climate change directly from observed temperature and radiative forcing data As we shall show, none of the temperature series nor those of the radiative forcing are integrated processes once breaks in the trend are accounted for, rendering the latter approach inappropriate We therefore use recently developed methods for analyzing the properties of trending series We focus on establishing evidence for the presence of breaks in the trend function that are common to observed temperatures and anthropogenic forcing, thereby establishing direct evidence for the effect of human factors in altering the long-run path of global and hemispheric temperatures. Once these breaks are accounted for, all remaining variations in temperature are stationary with different durations that can be accounted for by non-human factors. Our results are robust to different choices for the temperature and mixtures of anthropogenic and natural forcing series. The results provide clear evidence for the attribution of global warming to human activities.

#### Warming is occurring NOW and is anthropogenic—you should prefer peer-reviewed scientific data—scientific consensus is on our side.

**EDF 12**—Environment Defense Fund. “Scientific consensus on global warming Science community concurs warming is happening — and people are the cause” 7-12-12 <http://www.edf.org/climate/scientific-consensus> accessed date: 7-18-12 y2k

The most respected scientific bodies have stated unequivocally that global warming is occurring, and people are causing it by burning fossil fuels and cutting down forests.

This conclusion is shared by the national science academies of developed and developing countries ([read the statement [PDF]](http://www.nationalacademies.org/includes/G8+5energy-climate09.pdf)), plus many other organizations, including the[Intergovernmental Panel on Climate Change](http://www.ipcc.ch/), which was established by the United Nations and the [World Meteorological Organization](http://www.wmo.int/) to provide the world with "a clear scientific view" on climate change.

The only real debate is about how fast warming will occur, and how much damage will be done, as a result of human activities that produce heat-trapping CO2 and other greenhouse-gas emissions.

Peer review ensures sound science

Climate scientists, like all scientists, are professional skeptics. They welcome — in fact, rely upon — rigorous challenges to their work from colleagues. Through this process of peer review and independent verification, scientists critique and double- (and triple- and quadruple-) check each others work.

This can lead to debate and controversy, but over time, solid research is validated, errors are discarded, and a body of reliable facts is created. In addition, science advances by focusing on what is not yet known. In the case of climate change, for example, there is an extremely good general understanding of the phenomenon, but many details are not yet understood. These gaps in the research, as they come to light, are systematically tackled by the scientific community.

In this context, the kind of material used by climate-change skeptics to cast doubt on global warming — whether it be a handful of emails stolen from an East Anglian research facility or a few errors in an IPCC report — are meaningless. The mountain of climate data assembled over decades by the scientific community as a whole is irrefutable. The [records](http://www.edf.org/climate/how-we-know-the-earth-is-warming) collected and analyzed by independent scientists from many disciplines and thousands of locations, paint a consistent, verifiable picture of a [rapidly warming world](http://www.edf.org/climate/climate-change-impacts).

Make no mistake: Science has given us unequivocal warning that global warming is real. The time to start [working on solutions](http://www.edf.org/climate) is now.

#### Peer-review is still the best scientific process despite its flaw.

**Goldacre**, 9-11-**09**—Ben is a British science writer, doctor and psychiatrist, “Peer review is flawed but the best we've got”

<http://www.guardian.co.uk/commentisfree/2009/sep/12/bad-science-peer-review-goldacre> accessed date: 6-2-12 y2k

This week the peer review system has been in the newspapers, after a survey of scientists suggested it had some problems. That is barely news. Peer review – where articles submitted to an academic journal are reviewed by other scientists from the same field for an opinion on their quality – has always been recognised as problematic. It is time-consuming, it could be open to corruption, and it cannot prevent fraud, plagiarism, or duplicate publication, although in a more obvious case it might. The problem with peer review is, it's hard to find anything better.

Here is one example of a failing alternative. This month, after a concerted campaign by academics aggregating around websites such as[Aidstruth.org](http://www.aidstruth.org/), academic publishers Elsevier have withdrawn two papers from a journal called Medical Hypotheses. This journal is a rarity: it does not have peer review, and instead, submissions are approved for publication by its one editor.

Articles from Medical Hypotheses have appeared in this column quite a lot. They carried one almost surreally crass paper in which two Italian doctors argued "mongoloid" really was an appropriate term for people with Down's syndrome after all, because they share many characteristics with oriental populations (including: sitting cross-legged; eating small amounts of lots of types of food with MSG in it; and an enjoyment of handicrafts). You might also remember two pieces discussing the benefits and side-effects of masturbation as a treatment for nasal congestion.

The papers withdrawn this month step into a new domain of foolishness. Both were from the community who characterise themselves as "Aids dissidents", and one was co-authored by their figureheads, Peter Duesberg and David Rasnick.

To say a peer reviewer might have spotted the flaws in their paper – which had already been rejected by the Journal of Aids – is an understatement. My favourite part is the whole page they devote to arguing that there cannot be lots of people dying of Aids in South Africa because the population of the country has grown in the past few years.

We might expect anyone to spot such poor reasoning but they also misrepresent landmark papers from the literature on Aids research. Rasnick and Duesberg discuss antiretroviral drugs that have side-effects but which have stopped Aids being a death sentence, and attack the notion their benefits outweigh the toxicity: "contrary to these claims", they say, "hundreds of American and British researchers jointly published a collaborative analysis in The Lancet in 2006, concluding treatment of Aids patients with anti-viral drugs has 'not translated into a decrease in mortality'."

That is a simple, flat, unambiguous misrepresentation of the Lancet paper to which they refer.

What does this tell us about peer review? The editor of Medical Hypotheses, Bruce Charlton, has repeatedly argued – very reasonably – that the academic world benefits from having journals with different editorial models, that peer review can censor provocative ideas, and that scientists should be free to pontificate in their internal professional literature. But there are blogs where Aids dissidents, or anyone, can pontificate wildly and to their colleagues: from journals we expect a little more.

#### Environmental sckepticism is backed by conservative political elites—reject their authors.

**Jacques et al 8**—Peter J. Jacques is Prof. @ Department of Political Science University of Central Florida. Riley E.Dunlap is Ph.D. Regents Professor of Sociology @ University of Oregon. Mark Freeman , Department of Political Science, University of Central

Florida. “The organisation of denial: Conservative think tanks and environmental skepticism” <http://www.tandfonline.com/loi/fenp20> accessed date: 7-23-12 y2k

Our analyses of the sceptical literature and CTTs [Conservative Think Tanks] indicate an unambiguous linkage between the two. Over 92 per cent of environmentally sceptical books are linked to conservative think tanks, and 90 per cent of conservative think tanks interested in environmental issues espouse scepticism. Environmental scepticism began in the US, is strongest in the US, and exploded after the end of the Cold War and the emergence of global environmental concern stimulated by the 1992 Earth Summit. Environmental scepticism is an elite-driven reaction to global environmentalism, organised by core actors within the conservative movement. Promoting scepticism is a key tactic of the anti-environmental counter-movement coordinated by CTTs, designed specifically to undermine the environmental movement’s efforts to legitimise its claims via science. Thus, the notion that environmental sceptics are unbiased analysts exposing the myths and scare tactics employed by those they label as practitioners of ‘junk science’ lacks credibility. Similarly, the self-portrayal of sceptics as marginalised ‘Davids’ battling the powerful ‘Goliath’ of environmentalists and environmental scientists is a charade, as sceptics are supported by politically powerful CTTs funded by wealthy foundations and corporations. Given the success of CTTs in promoting environmental scepticism, particularly obvious in the case of climate change (Antilla 2005; Boykoff and Boykoff 2004; McCright and Dunlap 2003; Mooney 2007), it seems reasonable to conclude that the CTT-based countermovement has contributed to the decline of US support for environmental protection in recent decades. The ability of CTTs to influence environmental policy replicates their accomplishments in other policy domains (Covington 1997; Callahan 1999; Krehely et al. 2004; Stefancic and Delgado 1996), and thus should come as no surprise.

### A2: Adoptation

#### Adaptation is impossible

**Romm 10**

(Joe, PhD in Physics from MIT, senior fellow at American progress, editor of Climate Progress, “Real adaptation is as politically tough as real mitigation, but much more expensive and not as effective in reducing future misery,” Climate Progress, August 27, 2010)

Rhetorical adaptation, however, is a political winner. Too bad it means preventable suffering for billions. We basically have three choices: mitigation, adaptation and suffering. We’re going to do some of each. The question is what the mix is going to be. The more mitigation we do, the less adaptation will be required and the less suffering there will be. That’s the pithiest expression I’ve seen on the subject of adaptation, via John Holdren, now science advisor. Sometimes he uses “misery,” rather than “suffering.” I’m going to start a multipart series on adaptation — in honor of the fifth anniversary of Katrina. That disaster provides many lessons we continue to ignore, such as Global warming “adaptation” is a cruel euphemism “” and prevention is far, far cheaper. I draw a distinction between real adaptation, where one seriously proposes trying to prepare for what’s to come if we don’t do real mitigation (i.e. an 800 to 1000+ ppm world aka Hell and High Water) and rhetorical adaptation, which is a messaging strategy used by those who really don’t take global warming seriously — those who oppose serious mitigation and who don’t want to do bloody much of anything, but who don’t want to seem indifferent to the plight of humanity (aka poor people in other countries, who they think will be the only victims at some distant point in the future). In practice, rhetorical adaptation really means “buck up, fend for yourself, walk it off.” Let’s call the folks who push that “maladapters.” Typically, people don’t spell out specifically where they stand on the scale from real to rhetorical. I do understand that because mitigation is so politically difficult, people are naturally looking at other “strategies.” But most of the discussion of adaptation in the media and blogosphere misses the key points: Real adaptation is substantially more expensive than mitigation (see Scientists find “net present value of climate change impacts” of $1240 TRILLION on current emissions path, making mitigation to under 450 ppm a must, reprinted below). Real adaptation without very substantial mitigation is just a cruel euphemism (see An introduction to global warming impacts: Hell and High Water). Real adaptation requires much bigger and far more intrusive government than mitigation. Indeed, if the anti-science ideologues get their way and stop serious mitigation, then the government will inevitably get into the business of telling people where they can and can’t live (can’t let people keep rebuilding in the ever-spreading flood plains or the ever-enlarging areas threatened by sea level rise and DustBowlification) and how they can live (sharp water curtailment in the SW DustBowl, for instance) and possibly what they can eat. Conservative action against climate action now will force big government in coming decades to triage our major coastal cities — Key West and Galveston and probably New Orleans would be unsavable, but what about Miami and Houston? I’ll do a separate post on this and would love suggestions for what kinds of things government would have to decide and spend money on if we listen to the maladapters and stay anywhere near our current emissions path. Real adaptation is so expensive (and endless) that it is essentially impossible to imagine how a real adaptation bill could pass Congress — unless of course you paid for it with a high and rising price for CO2. Hmm. Why didn’t somebody think of that? The only people who will pursue real adaptation are those who understand the latest science and are prepared to take serious political action based on that understanding. Unfortunately, that doesn’t include any of the people people who helped kill the climate bill. There isn’t really much point in spending tens of billions of dollars to plan for, say, a sea level rise of one foot if that isn’t what’s coming. The point is, you can’t even imagine doing the planning and bill-writing and then actually investing in real adaptation — unless you accept the science and do serious worst-case planning. But if you accepted the science, you’d obviously pursue mitigation as your primary strategy, while using some of the proceeds from the climate bill to support adaptation. So real adaptation is not more politically viability than real mitigation — and what really is the point of pursuing something that is not more politically viable than mitigation when it won’t actually prevent misery and suffering for billions of people? Sure, we must pursue adaptation for Americans — and we are ethically bound to help developing countries adapt to the climate change that we helped create — but real mitigation is the sine qua non. Real mitigation is an effort to keep emissions as far below 450 ppm as is possible — and if we go above 450 ppm, to get back to 350 as fast as possible (see How the world can stabilize at 350 to 450 ppm: The full global warming solution). Let me expand on #1 and #2 below. What is the cost of “adaptation”? It is almost incalculable. The word is a virtually meaningless euphemism in the context of catastrophic global warming. Here is what we now understand we may very well face on our current emissions path: M.I.T. doubles its 2095 warming projection to 10°F “” with 866 ppm and Arctic warming of 20°F Our hellish future: Definitive NOAA-led report on U.S. climate impacts warns of scorching 9 to 11°F warming over most of inland U.S. by 2090 with Kansas above 90°F some 120 days a year “” and that isn’t the worst case, it’s business as usual!“ Ocean dead zones to expand, “remain for thousands of years” Sea levels may rise 3 times faster than IPCC estimated, could hit 6 feet by 2100 Science: CO2 levels haven’t been this high for 15 million years, when it was 5° to 10°F warmer and seas were 75 to 120 feet higher “” “We have shown that this dramatic rise in sea level is associated with an increase in CO2 levels of about 100 ppm.” Nature Geoscience study: Oceans are acidifying 10 times faster today than 55 million years ago when a mass extinction of marine species occurred And that isn’t the worst case: UK Met Office: Catastrophic climate change, 13-18°F over most of U.S. and 27°F in the Arctic, could happen in 50 years, but “we do have time to stop it if we cut greenhouse gas emissions soon.” NOAA: Climate change “largely irreversible for 1000 years,” with permanent Dust Bowls in Southwest and around the globe How exactly do you adapt to thatWhat precisely do you plan for in your adaptation strategy? You need to determine at some point whether you can save Miami, say, because you wouldn’t want to waste $100 billion trying only to find out you planned for the wrong scenario and it was hopeless. Then again, who is going to get people out of their cities as long as one political party is devoted to shouting down anybody who claims humans are actually warming the planet. And how exactly do Muscovites “adapt” to the possibility of 20°F Arctic warming? What would a 1000-year heat-wave look like in 2100 if the planet is 9°F warmer? How exactly would the world adapt to see levels 4 to 6 feet high in 2100 and then rising 1 foot a decade? Fundamentally, massive prevention plus lots of adaptation (and some misery) is much, much, much cheaper than not bloody much prevention and incomprehensible amounts of adaptation and suffering and misery. And as the IIED reported a year ago, the study Assessing the costs of adaptation to climate change: a review of the UNFCCC and other recent estimates concludes costs will be even more when the full range of climate impacts on human activities is considered. Scientists led by a former co-chair of the Intergovernmental Panel on Climate Change [warn] that the UN negotiations aimed at tackling climate change are based on substantial underestimates of what it will cost to adapt to its impacts. The real costs of adaptation are likely to be 2-3 times greater than estimates made by the UN Framework Convention on Climate Change (UNFCCC), say Professor Martin Parry and colleagues in a new report published by the International Institute for Environment and Development [IIED]. The study finds that the mean “Net present value of climate change impacts” in the A2 scenario is $1240 TRILLION with no adaptation, but “only” $890 trillion with adaptation. The mean [annual] impacts in 2060 are about $1.5 trillion”¦. As usual, there is a long right tail, with a small probability of impacts as large as $20 trillion. Don’t worry folks, it’s only a “small probability” (in their analysis) “” but that “fat tail” by itself is enough to render all traditional economic analyses useless (see Harvard economist: Climate cost-benefit analyses are “unusually misleading,” warns colleagues “we may be deluding ourselves and others”). Let’s put aside the fact we are on pace to exceed the A2 scenario (which is “only” about 850 ppm atmospheric concentrations of CO2 in 2100): See U.S. media largely ignores latest warning from climate scientists: “Recent observations confirm “¦ the worst-case IPCC scenario trajectories (or even worse) are being realised” “” 1000 ppm. For this country, the A2 scenario means 9 to 11°F warming over most of inland U.S. by 2090 with Kansas above 90°F some 120 days a year. But here’s the key point the media and the authors failed to convey. In the “aggressive abatement” case (450 ppm), the mean “Net present value [NPV] of climate change impacts” is only $410 trillion “” or $275 trillion with adaptation. So stabilizing at 450 ppm reduces NPV impacts by $615 to $830 trillion. But the abatement NPV cost is only $110 trillion “” a 6-to-1 savings or better. Bizarrely, the authors never point this out directly. They are adaptation experts, so rather than focusing on the immense economic benefits of preventing catastrophic global warming in the first place, they offer up this secondary conclusion as their primary finding: Parry and colleagues warn that this underestimate of the cost of adaptation threatens to weaken the outcome of UNFCCC negotiations, which are due to culminate in Copenhagen in December with a global deal aimed at tackling climate change. “The amount of money on the table at Copenhagen is one of the key factors that will determine whether we achieve a climate change agreement,” says Professor Parry, visiting research fellow at the Grantham Institute for Climate Change at Imperial College London. “But previous estimates of adaptation costs have substantially misjudged the scale of funds needed.” Uhhh, not quite. What actually weakened the outcome of the Copenhagen negotiations is that the overwhelming majority of politicians, opinion makers, and journalists in this country (and around the world, I think) don’t get that 1) the cost of inaction is catastrophically high [and potentially beyond calculation] and 2) the cost of action is far, far lower [see also "Intro to climate economics: Why even strong climate action has such a low total cost -- one tenth of a penny on the dollar"]. Oh well. If you’re interested in why the IPCC underestimated adaptation costs, the study focuses on several areas: Water: The UNFCCC estimate of US$11 billion excluded costs of adapting to floods and assumes no costs for transferring water within nations from areas of surplus to areas of deficit. The underestimate could be substantial, according to the new report. Health: The UNFCCC estimate of US$5 billion excluded developed nations, and assessed only malaria, diarrhoea and malnutrition. This could cover only 30-50% of the global total disease burden, according to the new report. Infrastructure: The UNFCCC estimate of US$8-130 billion assumed that low levels of investment in infrastructure will continue to characterise development in Africa and other relatively poor parts of the world. But the new report points out that such investment must increase in order to reduce poverty and thus avoid continuing high levels of vulnerability to climate change. It says the costs of adapting this upgraded infrastructure to climate change could be eight times more costly than the higher estimates predicted by the UNFCCC. Coastal zones: The UNFCCC estimate of US$11 billion excluded increased storm intensity and used low IPCC predictions of sea level rise. Considering research on sea level rise published since the 2007 IPCC report, and including storms, the new report suggests costs could be about three times greater than predicted. Ecosystems: The UNFCCC excluded from its estimates the costs of protecting ecosystems and the services they can provide for human society. The new report concludes that that this is an important source of under-estimation, which could cost over US$350 billion, including both protected and non-protected areas. No surprise, really, given that the IPCC lowballs amplifying feedbacks and climate impacts, too. In fact, even this study lowballs the potential impacts of our current maladapter-driven climate policy, especially the very fat tail or the plausible worst-case scenario. Anyway, if you’re interested in the important stuff “” the enormous benefit of stabilizing at 450 ppm “” just jump to Chapter 8, page 103, here. The bottom line on adaptation: I’m all for it. That’s precisely why I support a comprehensive climate bill, since it is the only plausible way to 1) pay for domestic adaptation [and the share of developing country adaptation that we are ethically bound to provide] and 2) have a serious possibility of limiting future climate impacts to a level that one could actually adapt to.

### A2: No Tipping Points

#### Tipping points are likely – leads to runaway warming

**Guterl 12** – Editor @ Scientific American

(Fred, “Climate Armageddon: How the World's Weather Could Quickly Run Amok: Climate scientists think a perfect storm of climate "flips" could cause massive upheavals in a matter of years, http://www.scientificamerican.com/article.cfm?id=how-worlds-weather-could-quickly-run-amok)

One of the most productive scientists in applying dynamical systems theory to climate is Tim Lenton at the University of East Anglia in England. Lenton is a Lovelockian two generations removed— his mentors were mentored by Lovelock. "We are looking quite hard at past data and observational data that can tell us something," says Lenton. "Classical case studies in which you've seen abrupt changes in climate data. For example, in the Greenland ice-core records, you're seeing climate jump. And the end of the Younger Dryas," about fifteen thousand years ago, "you get a striking climate change." So far, he says, nobody has found a big reason for such an abrupt change in these past events—no meteorite or volcano or other event that is an obvious cause—which suggests that perhaps something about the way these climate shifts occur simply makes them sudden. Lenton is mainly interested in the future. He has tried to look for things that could possibly change suddenly and drastically even though nothing obvious may trigger them. He's come up with a short list of nine tipping points—nine weather systems, regional in scope, that could make a rapid transition from one state to another. Each year, the sun shines down on the dark surface of the Indian Ocean, and moist, warm air rises and forms clouds. This rising heat and the moisture form a powerful weather system, a natural pump that pulls up water and moves it in vast quantities hundreds of miles to the mainland. This is the Indian monsoon, which deposits rainfall on thousands of square miles of farmland. About a billion people, most of them poor, depend for their daily bread on crops that depend in turn on the reliability and regularity of the Indian monsoons. India is a rapidly developing country with hundreds of millions of citizens who want to move into the middle class, drive cars and cool their homes with air-conditioning. It is also a country of poor people, many who still rely on burning agricultural waste to heat their homes and cook their suppers. Smoke from household fires has been a big source of pollution in the subcontinent, and it could disrupt the monsoons, too. The soot from these fires and from automobiles and buses in the ever more crowded cities rises into the atmosphere and drifts out over the Indian Ocean, changing the atmospheric dynamics upon which the monsoons depend. Aerosols (soot) keep much of the sun's energy from reaching the surface, which means the monsoon doesn't get going with the same force and takes longer to gather up a head of steam. Less rain makes it to crops. At the same time, the buildup of greenhouse gases, coming mainly from developed countries in the northern hemisphere, has a very different effect on the Indian summer monsoons: it acts to make them stronger. These two opposite influences make the fate of the monsoon difficult to predict and subject to instability. A small influence—a bit more carbon dioxide in the atmosphere, and a bit more brown haze—could have an out- size effect. Lenton believes that the monsoons could flip from one state to another as quickly as one year. What happens then is not a question that Lenton can answer with certainty, but he foresees two possibilities. One is that the monsoons grow in force and intensity, but come less frequently. We have already seen hints of this in the newspapers. In the last few years rains have grown erratic and less frequent, but when they do come, they tend to dump an enormous amount of water, and in places where they wouldn't normally do so. This is almost as bad for farmers as drought, since the rain falls on parched ground with extra force, and much of it runs off without soaking into the ground, and it causes damage to boot by washing away soil and plants. The flooding that devastated Pakistan in 2011 is a case in point. If this trend continued and strengthened in intensity, it would be bad news for the two thirds of the Indian workforce that depends on farming. It would be nasty for the Indian economy—agriculture accounts for 25 percent of GDP. A permanently erratic and harsh monsoon would depress crop yields, increase erosion on farms, and cause a rise in global food prices as India is forced to import more food. The other possibility is even worse: the monsoons could shut down entirely. This would be an unmitigated catastrophe. A sudden stopping of monsoon rain, which accounts for 80 percent of rainfall in India, could throw a billion people into danger of starvation. It would change the Indian landscape, wiping out native species of plants and animals, force farms into bankruptcy, and exacerbate water shortages that are already creating conflict. The Indian government would almost certainly be unable to cope with a disaster of such proportions. Refugees by the hundreds of millions would stream into big cities such as Mumbai and Bangalore, looking for some hope of survival. It would create a humanitarian crisis of unprecedented proportions. Lenton foresees a similar danger of sudden change in the West African monsoon, the second tipping point. Tipping point number three in Lenton's list is the sea ice of the north pole. For years the ice has been thinning and retreating more and more during the summer. Soon it may disappear completely during the summer months. We may already have reached this tipping point—a transition to a new state in which the north pole is ice-free during summer months is already at hand. Eventually the north pole may flip and be free of ice year-round. The knock-on effects of such a transition would be huge—they would cause marked increase of warming at the pole, since open water absorbs more of the sun's energy than ice-covered seas. The effect of a year-round ice-free north pole would be like heating Greenland on a skillet. The fourth tipping point is Greenland's glaciers, which hold enough water to cause sea levels to rise by more than twenty feet. It takes a while for that much ice to melt, of course. Currently, the Intergovernmental Panel on Climate Change projections say it will take on the order of a thou- sand years. Scientists currently don't have a good handle on how such a big hunk of ice melts. For plenty of reasons it could happen much more quickly—recent observations suggest that the melting has not only exceeded what models predict, but has also begun to accelerate. A marked retreat of ice in coastal areas has led to an infusion of ocean water, which is relatively warm and promotes melting. All this leads Lenton to conclude that the Greenland ice sheets could make a transition to an alternate state in three hundred years, rather than a thousand or more. Such a quick melting of Greenland would have a knock-on effect on the ocean currents that run up the Atlantic, bringing warmth to northern Europe and Scandinavia, the Atlantic thermohaline circulation. A sudden change in this current could plunge much of Europe back into an ice age. Scientists were getting nervous about this possibility a few years ago, until further research suggested that any switch in current is a long way off—perhaps a thousand years off. Lenton argues that an accelerated melting of Greenland would throw more freshwater on the northern Atlantic than these reassuring calculations have taken into account. "The canary in the coal mine is the Arctic losing its summer sea-ice cover," says Lenton. "I am really worried about the Greenland ice sheet. It's already losing mass and shrinking." If Greenland flipped into a completely ice-free state, it would cause massive rises in sea level—on the order of six or seven meters. Even if this took three hundred years to happen, "it would be an absolute disaster," says Lenton, "a real game changer." At such a rate of sea-level rise, it would be- come more and more difficult to protect coastlines. Low-lying areas would have to be abandoned. That includes cities such as New York, Los Angeles, San Francisco, London, Tokyo, and Hong Kong, not to mention the entire state of Florida and vast swaths of Indochina. Tipping point number six—the west Antarctic ice sheet—is even scarier. It has enough ice on it to raise sea levels by about eighty meters. The ice is melting, but slowly—most worst-case scenarios give the ice centuries to melt. But there are some niggling doubts about whether the West Antarctic Ice Sheet could calve into the sea more quickly than expected, as the glaciers contract. If that happened, it would push sea levels up by five meters in as short a time as a century. Most experts consider this unlikely, but if it did happen, Lenton thinks the sheet could flip in as little time as three hundred years—three times faster than most models predict. Water and ice aren't the only worries. The Amazon rain forest, the seventh of Lenton's tipping points, is also in jeopardy. Rain forests are always pretty wet, but they have dry seasons, and those dry seasons turn out to be a limiting factor on the survival of flora and fauna. As loggers reduce the number of trees that produce moisture to feed the gathering rains, the drier the dry seasons get, and the longer they last. Lately dry seasons in the Amazon have gotten more severe and have put a crimp on the survival of many of the trees that form the forest canopy, which is the backbone of the rain-forest ecosystem. As the dry season continues to lengthen, the flora draw more and more water from the soil, which eventually begins to dry out. The trees get stressed and begin to die. There's more fodder on the forest floor for wildfires. This is not hypothetical; it's already begun to happen. We saw this during the estimated twelve thousand wildfires that occurred in the Amazon during the drought of 2010. As the forest loses more and more trees, it loses its ability to feed the weather patterns with warm, moist air. If and when the Amazon flips into a drier state, it would have an big effect of weather patterns. The Amazon is basically a big spot of wet tropics. Knock out the trees and lose that moist air, and the regional circulation pattern changes as well. A similar flip could occur in Canada's boreal forests (tipping point number eight). A die-off of these forests would release much of the 50 billion to 100 billion tons of carbon now trapped in permafrost.